

PREVIEW

CLOSE

Quiz: Simplifying Products of Radicals

Question 1a of 15 (3 Products of Radicals 92142)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{8} \cdot \sqrt{5}$$

	Choice	Feedback
*A.	$2\sqrt{10}$	Correct!
B.	$\sqrt{13}$	
C.	$4\sqrt{10}$	
D.	$10\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $2\sqrt{10}$.

Question 1b of 15 (3 Products of Radicals 294890)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{6} \cdot \sqrt{3}$$

	Choice	Feedback
A.	$3\sqrt{3}$	
*B.	$3\sqrt{2}$	Correct!
C.	$9\sqrt{2}$	

D.	$2\sqrt{5}$	
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Global Incorrect Feedback

The correct answer is: $3\sqrt{2}$.

Question 1c of 15 (3 Products of Radicals 294891)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{8} \cdot \sqrt{6}$$

	Choice	Feedback
A.	$6\sqrt{3}$	
*B.	$2\sqrt{6}$	Correct!
C.	$3\sqrt{6}$	
D.	$3\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $2\sqrt{6}$.

Question 2a of 15 (3 Products of Radicals 92143)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{14} \cdot \sqrt{8}$$

	Choice	Feedback
*A.	$4\sqrt{7}$	Correct!

B.	$16\sqrt{7}$	
C.	$4\sqrt{28}$	
D.	28	

Global Incorrect Feedback

The correct answer is: $4\sqrt{7}$.

Question 2b of 15 (3 Products of Radicals 294893)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{14} \cdot \sqrt{6}$$

	Choice	Feedback
A.	$12\sqrt{7}$	
B.	$6\sqrt{21}$	
*C.	$2\sqrt{21}$	Correct!
D.	28	

Global Incorrect Feedback

The correct answer is: $2\sqrt{21}$.

Question 2c of 15 (3 Products of Radicals 294895)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{14} \cdot \sqrt{10}$$

	Choice	Feedback
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A.	$4\sqrt{7}$	
B.	$4\sqrt{35}$	
*C.	$2\sqrt{35}$	Correct!
D.	35	

Global Incorrect Feedback

The correct answer is: $2\sqrt{35}$.

Question 3a of 15 (3 Products of Radicals 92144)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{2} \cdot \sqrt{10} \cdot \sqrt{5}$$

	Choice	Feedback
A.	$5\sqrt{2}$	
B.	$2\sqrt{50}$	
*C.	10	Correct!
D.	$4\sqrt{25}$	

Global Incorrect Feedback

The correct answer is: 10.

Question 3b of 15 (3 Products of Radicals 294898)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{2} \cdot \sqrt{5} \cdot \sqrt{6}$$

	Choice	Feedback
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A.	$2\sqrt{6}$	
B.	$3\sqrt{2}$	
C.	$2\sqrt{3}$	
*D.	6	Correct!

Global Incorrect Feedback

The correct answer is: 6.

Question 3c of 15 (3 Products of Radicals 294899)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{2} \cdot \sqrt{6} \cdot \sqrt{3}$$

	Choice	Feedback
A.	$4\sqrt{7}$	
*B.	8	Correct!
C.	$8\sqrt{2}$	
D.	4	

Global Incorrect Feedback

The correct answer is: 8.

Question 4a of 15 (3 Products of Radicals 92145)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{2} \cdot \sqrt{5} \cdot \sqrt{5}$$

	Choice	Feedback
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A.	$16\sqrt{5}$	
*B.	$4\sqrt{5}$	Correct!
C.	$4\sqrt{20}$	
D.	$8\sqrt{10}$	

Global Incorrect Feedback

The correct answer is: $4\sqrt{5}$.

Question 4b of 15 (3 Products of Radicals 294900)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{5} \cdot \sqrt{5} \cdot \sqrt{6}$$

	Choice	Feedback
A.	$13\sqrt{3}$	
B.	$3\sqrt{5}$	
*C.	$3\sqrt{10}$	Correct!
D.	$9\sqrt{10}$	

Global Incorrect Feedback

The correct answer is: $3\sqrt{10}$.

Question 4c of 15 (3 Products of Radicals 294901)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{2} \cdot \sqrt{5} \cdot \sqrt{6}$$

	Choice	Feedback
*A.	$4\sqrt{3}$	Correct!
B.	$8\sqrt{12}$	
C.	$6\sqrt{3}$	
D.	$4\sqrt{12}$	

Global Incorrect Feedback

The correct answer is: $4\sqrt{3}$.

Question 5a of 15 (3 Products of Radicals 92146)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$5\sqrt{3}$$

Correct Answers:

	Choice
A.	$\sqrt{45}$
*B.	$\sqrt{75}$
C.	$\sqrt{3} \cdot \sqrt{5}$
*D.	$\sqrt{15} \cdot \sqrt{5}$
E.	75
*F.	$\sqrt{25} \cdot \sqrt{3}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

Global Incorrect Feedback	
	The correct answers are: $\sqrt{75}$, $\sqrt{15} \cdot \sqrt{5}$, and $\sqrt{25} \cdot \sqrt{3}$.

Question 5b of 15 (3 Products of Radicals 294902)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$6\sqrt{3}$$

Correct Answers:

	Choice
A.	$\sqrt{54}$
*B.	$\sqrt{108}$
*C.	$\sqrt{18} \cdot \sqrt{6}$
D.	$\sqrt{5} \cdot \sqrt{6}$
*E.	$\sqrt{5} \cdot \sqrt{36}$
F.	108

Attempt	Incorrect Feedback
1st	

Correct Feedback	
	Correct!

Global Incorrect Feedback	
	The correct answers are: $\sqrt{108}$, $\sqrt{18} \cdot \sqrt{6}$, and $\sqrt{5} \cdot \sqrt{36}$.

Question 5c of 15 (3 Products of Radicals 294903)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$4\sqrt{3}$$

Correct Answers:

	Choice
*A.	$\sqrt{12} \cdot \sqrt{4}$
*B.	$\sqrt{48}$
C.	$\sqrt{4} \cdot \sqrt{3}$
D.	$3\sqrt{16}$
*E.	$\sqrt{24} \cdot \sqrt{2}$
F.	48

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{12} \cdot \sqrt{4}$, $\sqrt{48}$, and $\sqrt{24} \cdot \sqrt{2}$.

Question 6a of 15 (3 Products of Radicals 92147)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$4\sqrt{6}$$

Correct Answers:

	Choice
A.	96
*B.	$\sqrt{32} \cdot \sqrt{3}$
C.	$\sqrt{24}$
*D.	$\sqrt{16} \cdot \sqrt{6}$
*E.	$\sqrt{96}$
F.	$\sqrt{4} \cdot \sqrt{36}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{32} \cdot \sqrt{3}$, $\sqrt{16} \cdot \sqrt{6}$, and $\sqrt{96}$.

Question 6b of 15 (3 Products of Radicals 294904)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$3\sqrt{6}$$

Correct Answers:

	Choice
*A.	$\sqrt{54}$
*B.	$\sqrt{12} \cdot \sqrt{3}$
C.	$\sqrt{18}$

D.	$\sqrt{27} \cdot \sqrt{4}$
*E.	$\sqrt{9} \cdot \sqrt{6}$
F.	54

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{54}$, $\sqrt{27} \cdot \sqrt{2}$, and $\sqrt{9} \cdot \sqrt{6}$.

Question 6c of 15 (3 Products of Radicals 294905)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$3\sqrt{8}$$

Correct Answers:

	Choice
*A.	$\sqrt{9} \cdot \sqrt{6}$
B.	$\sqrt{6} \cdot \sqrt{24}$
*C.	$\sqrt{3} \cdot \sqrt{24}$
D.	$\sqrt{6} \cdot \sqrt{2}$
E.	72
*F.	$\sqrt{6} \cdot \sqrt{12}$

Attempt	Incorrect Feedback

1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answers are: $\sqrt{3} \cdot \sqrt{6}$, $\sqrt{3} \cdot \sqrt{4}$, and $\sqrt{6} \cdot \sqrt{2}$.

Question 7a of 15 (3 Products of Radicals 92148)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{6} \cdot \sqrt{8}$$

Correct Answers:

	Choice
*A.	$\sqrt{16} \cdot \sqrt{3}$
*B.	$\sqrt{48}$
C.	12
*D.	$4\sqrt{3}$
E.	48
F.	$\sqrt{14}$

	Attempt	Incorrect Feedback
1st		
	Correct Feedback	
	Correct!	
	Global Incorrect Feedback	
	The correct answers are: $\sqrt{16} \cdot \sqrt{3}$, $\sqrt{48}$, and $4\sqrt{3}$.	

Question 7b of 15 (3 Products of Radicals 294906)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{6} \cdot \sqrt{10}$$

Correct Answers:

	Choice
A.	60
*B.	$\sqrt{60}$
*C.	$2\sqrt{15}$
*D.	$\sqrt{4} \cdot \sqrt{15}$
E.	20
F.	$\sqrt{16}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{60}$, $2\sqrt{15}$, and $\sqrt{4} \cdot \sqrt{15}$.

Question 7c of 15 (3 Products of Radicals 294907)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{8} \cdot \sqrt{2}$$

Correct Answers:

	Choice
A.	$\sqrt{16}$
*B.	$\sqrt{32}$
C.	12
*D.	$\frac{1}{2}\sqrt{3}$
*E.	$4\sqrt{2}$
F.	16

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{32}$, $\frac{1}{2}\sqrt{3}$, and $4\sqrt{2}$.

Question 8a of 15 (3 Products of Radicals 92149)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{3} \cdot \sqrt{5} \cdot \sqrt{10}$$

Correct Answers:

	Choice
A.	$10\sqrt{15}$
*B.	$5\sqrt{6}$
*C.	$\sqrt{150}$

D.	150
E.	$15\sqrt{10}$
*F.	$\sqrt{15} \cdot \sqrt{10}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $5\sqrt{6}$, $\sqrt{150}$, and $\sqrt{15} \cdot \sqrt{10}$.

Question 8b of 15 (3 Products of Radicals 294908)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{3} \cdot \sqrt{6} \cdot \sqrt{10}$$

Correct Answers:

	Choice
*A.	$3\sqrt{20}$
B.	$5\sqrt{12}$
*C.	$\sqrt{180}$
D.	180
*E.	$\sqrt{15} \cdot \sqrt{12}$
F.	$9\sqrt{20}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answers are: $3\sqrt{20}$, $\sqrt{180}$, and $\sqrt{15} \cdot \sqrt{12}$.

Question 8c of 15 (3 Products of Radicals 294909)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{2} \cdot \sqrt{5} \cdot \sqrt{10}$$

Correct Answers:

	Choice
*A.	$\sqrt{100}$
*B.	$2\sqrt{25}$
C.	100
*D.	10
E.	$10\sqrt{10}$
F.	$\sqrt{15}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{100}$, $2\sqrt{25}$, and 10.

Question 9a of 15 (1 Identifying the Radicand 292055)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question:

You write a radical sign ($\sqrt{\quad}$) to indicate a square root. The number under this sign is called the radical.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 9b of 15 (1 Identifying the Radicand 294911)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question:

You write a radical sign ($\sqrt{\quad}$) to indicate a square root. The number under this sign is called the radicand.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 9c of 15 (1 Identifying the Radicand 294912)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question:

You write a radical sign ($\sqrt{\quad}$) to indicate a square root. The number under this sign is called the radical.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 10a of 15 (1 Identifying Principal Square Roots 92151)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: Every positive number has two square roots: the principal square root and its opposite.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 10b of 15 (1 Identifying Principal Square Roots 294913)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: Every positive number has two square roots: the principal square root and its opposite.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 10c of 15 (1 Identifying Principal Square Roots 294914)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: Every positive number has only one square root.

	Choice	Feedback
A.	True	

*B.	False	Correct!
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Global Incorrect Feedback
The correct answer is: False.

Question 11a of 15 (2 Finding Square Roots 92152)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 2
Question: What are the square roots of 81? *Check all that apply.*

Correct Answers:

	Choice
A.	9.5
*B.	9
C.	3
*D.	-9
E.	-3
*F.	9

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: 9 , -9, and 9.

Question 11b of 15 (2 Finding Square Roots 294915)

Maximum Attempts: 1
Question Type: Multiple Response
Maximum Score: 2
Question: What are the square roots of 64? *Check all that apply.*

Correct Answers:

	Choice
A.	8.5

B.	4
*C.	8
D.	-4
*E.	-8
*F.	8

Attempt	Incorrect Feedback
1st	

Correct Feedback
Correct!

Global Incorrect Feedback
The correct answers are: 8 , -8, and 8.

Question 11c of 15 (2 Finding Square Roots 294916)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: What are the square roots of 100? *Check all that apply.*

Correct Answers:

Choice	
*A.	10
B.	10.5
*C.	-10
D.	5
E.	-5
*F.	10

Attempt	Incorrect Feedback
1st	

Correct Feedback
Correct!

Global Incorrect Feedback
The correct answers are: 10, -10, and 10 .

Question 12a of 15 (2 Finding Square Roots 92153)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the principal square root of 81?

	Choice	Feedback
*A.	9	Correct!
B.	3	
C.	-9	
D.	-3	

Global Incorrect Feedback

The correct answer is: 9.

Question 12b of 15 (2 Finding Square Roots 294917)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the principal square root of 64?

	Choice	Feedback
A.	-8	
B.	4	
*C.	8	Correct!
D.	-4	

Global Incorrect Feedback

The correct answer is: 8.

Question 12c of 15 (2 Finding Square Roots 294918)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the principal square root of 16?

	Choice	Feedback
A.	-2	
B.	-4	

C.	2	
*D.	4	Correct!

Global Incorrect Feedback

The correct answer is: 4.

Question 13a of 15 (2 Finding Square Roots 92154)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any number a , $\sqrt{a^2} = \underline{\hspace{2cm}}$.

	Choice	Feedback
A.	a^2	
B.	$a - 1$	
*C.	$ a $	Correct!
D.	1	

Global Incorrect Feedback

The correct answer is: $|a|$.

Question 13b of 15 (2 Finding Square Roots 294919)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any number a , $|a| = \underline{\hspace{2cm}}$.

	Choice	Feedback
A.	a^2	
B.	$a - 1$	
C.	1	
*D.	$\sqrt{a^2}$	Correct!

Global Incorrect Feedback

The correct answer is: $\sqrt{a^2}$.

Question 13c of 15 (2 Finding Square Roots 294920)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any number a , $\sqrt{a^2} = \underline{\hspace{2cm}}$.

	Choice	Feedback
A.	a^2	
*B.	$ a $	Correct!
C.	1	
D.	$a - 1$	

Global Incorrect Feedback

The correct answer is: $|a|$.

Question 14a of 15 (2 Finding Square Roots 92155)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any nonnegative number b , $(\sqrt{b})^2 = \underline{\hspace{2cm}}$.

	Choice	Feedback
A.	b^2	
*B.	b	Correct!
C.	$(\sqrt{b})^2$	
D.	1	

Global Incorrect Feedback

The correct answer is: b .

Question 14b of 15 (2 Finding Square Roots 294921)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any nonnegative number b , $b = \underline{\hspace{2cm}}$.

	Choice	Feedback
*A.	$(\sqrt{b})^2$	Correct!
B.	b^2	

C.	\sqrt{b}	
D.	1	

Global Incorrect Feedback

The correct answer is: $(\sqrt{b})^2$.

Question 14c of 15 (2 Finding Square Roots 294923)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any nonnegative number b , $(\sqrt{b})^2 = \underline{\hspace{2cm}}$.

	Choice	Feedback
*A.	b	Correct!
B.	$(\sqrt{b})^2$	
C.	b^2	
D.	1	

Global Incorrect Feedback

The correct answer is: b .

Question 15a of 15 (2 Finding Square Roots 92156)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to $\sqrt{0}$?

	Choice	Feedback
A.	1	
B.	$\sqrt{0}^2 - 1$	
C.	undefined	
*D.	0	Correct!

Global Incorrect Feedback

The correct answer is: 0.

Question 15b of 15 (2 Finding Square Roots 294924)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to $\sqrt{0}$?

	Choice	Feedback
*A.	0	Correct!
B.	$\sqrt{0}^2 - 1$	
C.	undefined	
D.	1	

Global Incorrect Feedback

The correct answer is: 0.

Question 15c of 15 (2 Finding Square Roots 294925)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to $\sqrt{0}$?

	Choice	Feedback
A.	1	
B.	$\sqrt{0}^2 - 1$	
*C.	0	Correct!
D.	undefined	

Global Incorrect Feedback

The correct answer is: 0.

PREVIEW

CLOSE

Quiz: Simplifying Products of Radicals

Question 1a of 15 (3 Products of Radicals 92142)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{8} \cdot \sqrt{5}$$

	Choice	Feedback
*A.	$2\sqrt{10}$	Correct!
B.	$\sqrt{13}$	
C.	$4\sqrt{10}$	
D.	$10\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $2\sqrt{10}$.

Question 1b of 15 (3 Products of Radicals 294890)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{6} \cdot \sqrt{3}$$

	Choice	Feedback
A.	$3\sqrt{3}$	
*B.	$3\sqrt{2}$	Correct!
C.	$9\sqrt{2}$	

D.	$2\sqrt{5}$	
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Global Incorrect Feedback

The correct answer is: $3\sqrt{2}$.

Question 1c of 15 (3 Products of Radicals 294891)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{8} \cdot \sqrt{6}$$

	Choice	Feedback
A.	$6\sqrt{3}$	
*B.	$2\sqrt{6}$	Correct!
C.	$3\sqrt{6}$	
D.	$3\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $2\sqrt{6}$.

Question 2a of 15 (3 Products of Radicals 92143)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{14} \cdot \sqrt{8}$$

	Choice	Feedback
*A.	$4\sqrt{7}$	Correct!

B.	$16\sqrt{7}$	
C.	$4\sqrt{28}$	
D.	28	

Global Incorrect Feedback

The correct answer is: $4\sqrt{7}$.

Question 2b of 15 (3 Products of Radicals 294893)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{14} \cdot \sqrt{6}$$

	Choice	Feedback
A.	$12\sqrt{7}$	
B.	$6\sqrt{21}$	
*C.	$2\sqrt{21}$	Correct!
D.	28	

Global Incorrect Feedback

The correct answer is: $2\sqrt{21}$.

Question 2c of 15 (3 Products of Radicals 294895)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{14} \cdot \sqrt{10}$$

	Choice	Feedback
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A.	$4\sqrt{7}$	
B.	$4\sqrt{35}$	
*C.	$2\sqrt{35}$	Correct!
D.	35	

Global Incorrect Feedback

The correct answer is: $2\sqrt{35}$.

Question 3a of 15 (3 Products of Radicals 92144)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{2} \cdot \sqrt{10} \cdot \sqrt{5}$$

	Choice	Feedback
A.	$5\sqrt{2}$	
B.	$2\sqrt{50}$	
*C.	10	Correct!
D.	$4\sqrt{25}$	

Global Incorrect Feedback

The correct answer is: 10.

Question 3b of 15 (3 Products of Radicals 294898)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{2} \cdot \sqrt{5} \cdot \sqrt{6}$$

	Choice	Feedback
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A.	$2\sqrt{6}$	
B.	$3\sqrt{2}$	
C.	$2\sqrt{3}$	
*D.	6	Correct!

Global Incorrect Feedback

The correct answer is: 6.

Question 3c of 15 (3 Products of Radicals 294899)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{2} \cdot \sqrt{6} \cdot \sqrt{3}$$

	Choice	Feedback
A.	$4\sqrt{7}$	
*B.	8	Correct!
C.	$8\sqrt{2}$	
D.	4	

Global Incorrect Feedback

The correct answer is: 8.

Question 4a of 15 (3 Products of Radicals 92145)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{2} \cdot \sqrt{5} \cdot \sqrt{3}$$

	Choice	Feedback
--	--------	----------

A.	$16\sqrt{5}$	
*B.	$4\sqrt{5}$	Correct!
C.	$4\sqrt{20}$	
D.	$8\sqrt{10}$	

Global Incorrect Feedback

The correct answer is: $4\sqrt{5}$.

Question 4b of 15 (3 Products of Radicals 294900)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{5} \cdot \sqrt{5} \cdot \sqrt{6}$$

	Choice	Feedback
A.	$13\sqrt{3}$	
B.	$3\sqrt{5}$	
*C.	$3\sqrt{10}$	Correct!
D.	$9\sqrt{10}$	

Global Incorrect Feedback

The correct answer is: $3\sqrt{10}$.

Question 4c of 15 (3 Products of Radicals 294901)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below?

$$\sqrt{2} \cdot \sqrt{5} \cdot \sqrt{6}$$

	Choice	Feedback
*A.	$4\sqrt{3}$	Correct!
B.	$8\sqrt{12}$	
C.	$6\sqrt{3}$	
D.	$4\sqrt{12}$	

Global Incorrect Feedback

The correct answer is: $4\sqrt{3}$.

Question 5a of 15 (3 Products of Radicals 92146)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$5\sqrt{3}$$

Correct Answers:

	Choice
A.	$\sqrt{45}$
*B.	$\sqrt{75}$
C.	$\sqrt{3} \cdot \sqrt{5}$
*D.	$\sqrt{15} \cdot \sqrt{5}$
E.	75
*F.	$\sqrt{25} \cdot \sqrt{3}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

Global Incorrect Feedback	
	The correct answers are: $\sqrt{75}$, $\sqrt{15} \cdot \sqrt{5}$, and $\sqrt{25} \cdot \sqrt{3}$.

Question 5b of 15 (3 Products of Radicals 294902)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$6\sqrt{3}$$

Correct Answers:

	Choice
A.	$\sqrt{54}$
*B.	$\sqrt{108}$
*C.	$\sqrt{18} \cdot \sqrt{6}$
D.	$\sqrt{5} \cdot \sqrt{6}$
*E.	$\sqrt{5} \cdot \sqrt{36}$
F.	108

Attempt	Incorrect Feedback
1st	

Correct Feedback	
	Correct!

Global Incorrect Feedback	
	The correct answers are: $\sqrt{108}$, $\sqrt{18} \cdot \sqrt{6}$, and $\sqrt{5} \cdot \sqrt{36}$.

Question 5c of 15 (3 Products of Radicals 294903)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$4\sqrt{3}$$

Correct Answers:

	Choice
*A.	$\sqrt{12} \cdot \sqrt{4}$
*B.	$\sqrt{48}$
C.	$\sqrt{4} \cdot \sqrt{3}$
D.	$3\sqrt{16}$
*E.	$\sqrt{24} \cdot \sqrt{2}$
F.	48

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{12} \cdot \sqrt{4}$, $\sqrt{48}$, and $\sqrt{24} \cdot \sqrt{2}$.

Question 6a of 15 (3 Products of Radicals 92147)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$4\sqrt{6}$$

Correct Answers:

	Choice
A.	96
*B.	$\sqrt{32} \cdot \sqrt{3}$
C.	$\sqrt{24}$
*D.	$\sqrt{16} \cdot \sqrt{6}$
*E.	$\sqrt{96}$
F.	$\sqrt{4} \cdot \sqrt{36}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{32} \cdot \sqrt{3}$, $\sqrt{16} \cdot \sqrt{6}$, and $\sqrt{96}$.

Question 6b of 15 (3 Products of Radicals 294904)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$3\sqrt{6}$$

Correct Answers:

	Choice
*A.	$\sqrt{54}$
*B.	$\sqrt{2} \cdot \sqrt{2}$
C.	$\sqrt{18}$

D.	$\sqrt{27} \cdot \sqrt{4}$
*E.	$\sqrt{9} \cdot \sqrt{6}$
F.	54

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{54}$, $\sqrt{27} \cdot \sqrt{2}$, and $\sqrt{9} \cdot \sqrt{6}$.

Question 6c of 15 (3 Products of Radicals 294905)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$3\sqrt{8}$$

Correct Answers:

	Choice
*A.	$\sqrt{9} \cdot \sqrt{6}$
B.	$\sqrt{6} \cdot \sqrt{24}$
*C.	$\sqrt{3} \cdot \sqrt{24}$
D.	$\sqrt{6} \cdot \sqrt{2}$
E.	72
*F.	$\sqrt{6} \cdot \sqrt{12}$

Attempt	Incorrect Feedback

1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answers are: $\sqrt{3} \cdot \sqrt{6}$, $\sqrt{3} \cdot \sqrt{4}$, and $\sqrt{6} \cdot \sqrt{2}$.

Question 7a of 15 (3 Products of Radicals 92148)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{6} \cdot \sqrt{8}$$

Correct Answers:

	Choice
*A.	$\sqrt{16} \cdot \sqrt{3}$
*B.	$\sqrt{48}$
C.	12
*D.	$4\sqrt{3}$
E.	48
F.	$\sqrt{14}$

	Attempt	Incorrect Feedback
1st		
	Correct Feedback	
	Correct!	
	Global Incorrect Feedback	
	The correct answers are: $\sqrt{16} \cdot \sqrt{3}$, $\sqrt{48}$, and $4\sqrt{3}$.	

Question 7b of 15 (3 Products of Radicals 294906)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{6} \cdot \sqrt{10}$$

Correct Answers:

	Choice
A.	60
*B.	$\sqrt{60}$
*C.	$2\sqrt{15}$
*D.	$\sqrt{4} \cdot \sqrt{15}$
E.	20
F.	$\sqrt{16}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{60}$, $2\sqrt{15}$, and $\sqrt{4} \cdot \sqrt{15}$.

Question 7c of 15 (3 Products of Radicals 294907)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{8} \cdot \sqrt{2}$$

Correct Answers:

	Choice
A.	$\sqrt{16}$
*B.	$\sqrt{32}$
C.	12
*D.	$\frac{1}{2}\sqrt{3}$
*E.	$4\sqrt{2}$
F.	16

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{32}$, $\frac{1}{2}\sqrt{3}$, and $4\sqrt{2}$.

Question 8a of 15 (3 Products of Radicals 92149)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{3} \cdot \sqrt{5} \cdot \sqrt{10}$$

Correct Answers:

	Choice
A.	$10\sqrt{15}$
*B.	$5\sqrt{6}$
*C.	$\sqrt{150}$

D.	150
E.	$15\sqrt{10}$
*F.	$\sqrt{15} \cdot \sqrt{10}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $5\sqrt{6}$, $\sqrt{150}$, and $\sqrt{15} \cdot \sqrt{10}$.

Question 8b of 15 (3 Products of Radicals 294908)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{3} \cdot \sqrt{6} \cdot \sqrt{10}$$

Correct Answers:

	Choice
*A.	$3\sqrt{20}$
B.	$5\sqrt{12}$
*C.	$\sqrt{180}$
D.	180
*E.	$\sqrt{15} \cdot \sqrt{12}$
F.	$9\sqrt{20}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answers are: $3\sqrt{20}$, $\sqrt{180}$, and $\sqrt{15} \cdot \sqrt{12}$.

Question 8c of 15 (3 Products of Radicals 294909)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{2} \cdot \sqrt{5} \cdot \sqrt{10}$$

Correct Answers:

	Choice
*A.	$\sqrt{100}$
*B.	$2\sqrt{25}$
C.	100
*D.	10
E.	$10\sqrt{10}$
F.	$\sqrt{15}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{100}$, $2\sqrt{25}$, and 10.

Question 9a of 15 (1 Identifying the Radicand 292055)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question:

You write a radical sign ($\sqrt{\quad}$) to indicate a square root. The number under this sign is called the radical.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 9b of 15 (1 Identifying the Radicand 294911)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question:

You write a radical sign ($\sqrt{\quad}$) to indicate a square root. The number under this sign is called the radicand.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 9c of 15 (1 Identifying the Radicand 294912)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question:

You write a radical sign ($\sqrt{\quad}$) to indicate a square root. The number under this sign is called the radical.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 10a of 15 (1 Identifying Principal Square Roots 92151)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: Every positive number has two square roots: the principal square root and its opposite.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 10b of 15 (1 Identifying Principal Square Roots 294913)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: Every positive number has two square roots: the principal square root and its opposite.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 10c of 15 (1 Identifying Principal Square Roots 294914)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: Every positive number has only one square root.

	Choice	Feedback
A.	True	

*B.	False	Correct!
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Global Incorrect Feedback
The correct answer is: False.

Question 11a of 15 (2 Finding Square Roots 92152)

Maximum Attempts: 1
 Question Type: Multiple Response
 Maximum Score: 2
 Question: What are the square roots of 81? *Check all that apply.*

Correct Answers:

	Choice
A.	9.5
*B.	9
C.	3
*D.	-9
E.	-3
*F.	9

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: 9 , -9, and 9.

Question 11b of 15 (2 Finding Square Roots 294915)

Maximum Attempts: 1
 Question Type: Multiple Response
 Maximum Score: 2
 Question: What are the square roots of 64? *Check all that apply.*

Correct Answers:

	Choice
A.	8.5

B.	4
*C.	8
D.	-4
*E.	-8
*F.	8

Attempt	Incorrect Feedback
1st	

Correct Feedback
Correct!

Global Incorrect Feedback
The correct answers are: 8 , -8, and 8.

Question 11c of 15 (2 Finding Square Roots 294916)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: What are the square roots of 100? *Check all that apply.*

Correct Answers:

Choice	
*A.	10
B.	10.5
*C.	-10
D.	5
E.	-5
*F.	10

Attempt	Incorrect Feedback
1st	

Correct Feedback
Correct!

Global Incorrect Feedback
The correct answers are: 10, -10, and 10 .

Question 12a of 15 (2 Finding Square Roots 92153)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the principal square root of 81?

	Choice	Feedback
*A.	9	Correct!
B.	3	
C.	-9	
D.	-3	

Global Incorrect Feedback

The correct answer is: 9.

Question 12b of 15 (2 Finding Square Roots 294917)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the principal square root of 64?

	Choice	Feedback
A.	-8	
B.	4	
*C.	8	Correct!
D.	-4	

Global Incorrect Feedback

The correct answer is: 8.

Question 12c of 15 (2 Finding Square Roots 294918)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the principal square root of 16?

	Choice	Feedback
A.	-2	
B.	-4	

C.	2	
*D.	4	Correct!

Global Incorrect Feedback

The correct answer is: 4.

Question 13a of 15 (2 Finding Square Roots 92154)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any number a , $\sqrt{a^2} = \underline{\hspace{2cm}}$.

	Choice	Feedback
A.	a^2	
B.	$a - 1$	
*C.	$ a $	Correct!
D.	1	

Global Incorrect Feedback

The correct answer is: $|a|$.

Question 13b of 15 (2 Finding Square Roots 294919)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any number a , $|a| = \underline{\hspace{2cm}}$.

	Choice	Feedback
A.	a^2	
B.	$a - 1$	
C.	1	
*D.	$\sqrt{a^2}$	Correct!

Global Incorrect Feedback

The correct answer is: $\sqrt{a^2}$.

Question 13c of 15 (2 Finding Square Roots 294920)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any number a , $\sqrt{a^2} = \underline{\hspace{2cm}}$.

	Choice	Feedback
A.	a^2	
*B.	$ a $	Correct!
C.	1	
D.	$a - 1$	

Global Incorrect Feedback

The correct answer is: $|a|$.

Question 14a of 15 (2 Finding Square Roots 92155)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any nonnegative number b , $(\sqrt{b})^2 = \underline{\hspace{2cm}}$.

	Choice	Feedback
A.	b^2	
*B.	b	Correct!
C.	$(\sqrt{b})^2$	
D.	1	

Global Incorrect Feedback

The correct answer is: b .

Question 14b of 15 (2 Finding Square Roots 294921)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any nonnegative number b , $b = \underline{\hspace{2cm}}$.

	Choice	Feedback
*A.	$(\sqrt{b})^2$	Correct!
B.	b^2	

C.	\sqrt{b}	
D.	1	

Global Incorrect Feedback

The correct answer is: $(\sqrt{b})^2$.

Question 14c of 15 (2 Finding Square Roots 294923)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For any nonnegative number b , $(\sqrt{b})^2 = \underline{\hspace{2cm}}$.

	Choice	Feedback
*A.	b	Correct!
B.	$(\sqrt{b})^2$	
C.	b^2	
D.	1	

Global Incorrect Feedback

The correct answer is: b .

Question 15a of 15 (2 Finding Square Roots 92156)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to $\sqrt{0}$?

	Choice	Feedback
A.	1	
B.	$\sqrt{0}^2 - 1$	
C.	undefined	
*D.	0	Correct!

Global Incorrect Feedback

The correct answer is: 0.

Question 15b of 15 (2 Finding Square Roots 294924)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to $\sqrt{0}$?

	Choice	Feedback
*A.	0	Correct!
B.	$\sqrt{0}^2 - 1$	
C.	undefined	
D.	1	

Global Incorrect Feedback

The correct answer is: 0.

Question 15c of 15 (2 Finding Square Roots 294925)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to $\sqrt{0}$?

	Choice	Feedback
A.	1	
B.	$\sqrt{0}^2 - 1$	
*C.	0	Correct!
D.	undefined	

Global Incorrect Feedback

The correct answer is: 0.

PREVIEW

CLOSE

Quiz: Multiplying Radicals

Question 1a of 15 (3 Multiplying Radicals 92015)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which inequality represents all values of x for which the product below is defined?

$$\sqrt{5x} \cdot \sqrt{x+3}$$

	Choice	Feedback
A.	$x \geq -3$	
*B.	$x \geq 0$	Correct!
C.	$x \geq 3$	
D.	$x > 0$	

Global Incorrect Feedback

The correct answer is: $x \geq 0$.

Question 1b of 15 (3 Multiplying Radicals 295223)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which inequality represents all values of x for which the product below is defined?

$$\sqrt{5x} \cdot \sqrt{x+4}$$

	Choice	Feedback
A.	$x \geq -4$	
*B.	$x \geq 0$	Correct!

C.	$x \geq -4$	
D.	$x > 0$	

Global Incorrect Feedback

The correct answer is: $x \geq 0$.

Question 1c of 15 (3 Multiplying Radicals 295224)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which inequality represents all values of x for which the product below is defined?

$$\sqrt{x+2} \cdot \sqrt{x-2}$$

	Choice	Feedback
A.	$x \geq -2$	
B.	$x \geq 2$	
*C.	$x \geq 0$	Correct!
D.	$x > 0$	

Global Incorrect Feedback

The correct answer is: $x \geq 0$.

Question 2a of 15 (3 Multiplying Radicals 92016)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which inequality represents all values of x for which the product below is defined?

$$\sqrt{x-4} \cdot \sqrt{x+1}$$

	Choice	Feedback
--	--------	----------

A.	$x \sqrt[3]{4}$	
B.	$x \sqrt[3]{-1}$	
*C.	$x \sqrt[3]{4}$	Correct!
D.	$x \sqrt[3]{0}$	

Global Incorrect Feedback

The correct answer is: $x \sqrt[3]{4}$.

Question 2b of 15 (3 Multiplying Radicals 295225)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which inequality represents all values of x for which the product below is defined?

$$\sqrt{x-1} \sqrt{x+1}$$

	Choice	Feedback
A.	$x \sqrt[3]{5}$	
B.	$x \sqrt[3]{-2}$	
C.	$x \sqrt[3]{0}$	
*D.	$x \sqrt[3]{5}$	Correct!

Global Incorrect Feedback

The correct answer is: $x \sqrt[3]{5}$.

Question 2c of 15 (3 Multiplying Radicals 295226)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which inequality represents all values of x for which the product below is defined?

$$\sqrt{x-6} \cdot \sqrt{x+3}$$

	Choice	Feedback
*A.	$x \geq 6$	Correct!
B.	$x \geq -3$	
C.	$x \leq 6$	
D.	$x \leq 0$	

Global Incorrect Feedback

The correct answer is: $x \geq 6$.

Question 3a of 15 (3 Multiplying Radicals 92017)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below for acceptable values of x ?

$$\sqrt{5x} \cdot \sqrt{x+3}$$

	Choice	Feedback
*A.	$\sqrt{5x^2 + 15x}$	Correct!
B.	$5x\sqrt{x+3}$	
C.	$\sqrt{5x^2 + 3}$	
D.	$\sqrt{5x^2 + 15}$	

Global Incorrect Feedback

The correct answer is: $\sqrt{5x^2 + 15x}$.

Question 3b of 15 (3 Multiplying Radicals 295227)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below for acceptable values of x ?

$$\sqrt{6x} \cdot \sqrt{x+3}$$

	Choice	Feedback
A.	$6x\sqrt{x+3}$	
B.	$\sqrt{6x^2+3}$	
C.	$\sqrt{6x^2+18}$	
*D.	$\sqrt{6x^2+18x}$	Correct!

Global Incorrect Feedback

The correct answer is: $\sqrt{6x^2+18x}$.

Question 3c of 15 (3 Multiplying Radicals 295228)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below for acceptable values of x ?

$$\sqrt{7x} \cdot \sqrt{x+2}$$

	Choice	Feedback
A.	$\sqrt{7x^2+x}$	
*B.	$\sqrt{7x^2+14x}$	Correct!
C.	$\sqrt{7x^2+7x}$	
D.	$\sqrt{7x^3+14}$	

Global Incorrect Feedback

The correct answer is: $\sqrt{x^2 + 4}$.

Question 4a of 15 (3 Multiplying Radicals 92018)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below for acceptable values of x ?

$$\sqrt{x+2} \cdot \sqrt{x-2}$$

	Choice	Feedback
A.	$\sqrt{x^2}$	
B.	$\sqrt{x^2 + 4}$	
*C.	$\sqrt{x^2 - 4}$	Correct!
D.	x	

Global Incorrect Feedback

The correct answer is: $\sqrt{x^2 - 4}$.

Question 4b of 15 (3 Multiplying Radicals 295229)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below for acceptable values of x ?

$$\sqrt{x+3} \cdot \sqrt{x-3}$$

	Choice	Feedback
A.	$\sqrt{x^2}$	
*B.	$\sqrt{x^2 - 9}$	Correct!
C.	$\sqrt{x^2 + 9}$	

D.	x	
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Global Incorrect Feedback

The correct answer is: $\sqrt{x^2 - 9}$.

Question 4c of 15 (3 Multiplying Radicals 295230)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below for acceptable values of x ?

$$\sqrt{x^2 - 1} \sqrt{x^2 - 1}$$

	Choice	Feedback
*A.	$\sqrt{x^2 - 1}$	Correct!
B.	$\sqrt{x^2 + 1}$	
C.	x	
D.	$\sqrt{x^2}$	

Global Incorrect Feedback

The correct answer is: $\sqrt{x^2 - 1}$.

Question 5a of 15 (3 Multiplying Radicals 92019)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below when $x \geq 0$?

$$\sqrt{5x^2} \cdot \sqrt{15x^2}$$

	Choice	Feedback
*A.	$5x^2\sqrt{3}$	Correct!
B.	$\sqrt{75x^2}$	

C.	$5\sqrt{3}x$	
D.	$\sqrt{20x^2}$	

Global Incorrect Feedback

The correct answer is: $5x^2\sqrt{3}$.


Question 5b of 15 (3 Multiplying Radicals 295231)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the product below when x 0?

$$\sqrt{4x^2} \cdot \sqrt{20x^2}$$

	Choice	Feedback
A.	$\sqrt{80x^2}$	
B.	$5\sqrt{1}x$	
*C.	$4x^2\sqrt{5}$	Correct!
D.	$\sqrt{20x^2}$	

Global Incorrect Feedback

The correct answer is: $4x^2\sqrt{5}$.


Question 5c of 15 (3 Multiplying Radicals 295232)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the product below when x 0?

$$\sqrt{4x^2} \cdot \sqrt{10x^2}$$

	Choice	Feedback
--	--------	----------

A.	$6\sqrt{3}x$	
B.	$6\sqrt{18}x$	
C.	$\sqrt{108x^2}$	
*D.	$6x^2\sqrt{3}$	Correct!

Global Incorrect Feedback

The correct answer is: $6x^2\sqrt{3}$.

Question 6a of 15 (3 Multiplying Radicals 92020)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the product below when $x \geq 0$?

$$\sqrt{6x^2} \cdot \sqrt{3x}$$

	Choice	Feedback
A.	$\sqrt{18x^2}$	
B.	$x\sqrt{18}$	
C.	$3x\sqrt{2}$	
*D.	$3x\sqrt{2x}$	Correct!

Global Incorrect Feedback

The correct answer is: $3x\sqrt{2x}$.

Question 6b of 15 (3 Multiplying Radicals 295233)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the product below when $x \geq 0$?

$$\sqrt{10x^2} \cdot \sqrt{5x}$$

	Choice	Feedback
A.	$\sqrt{15x^2}$	
*B.	$5x\sqrt{2x}$	Correct!
C.	$5x\sqrt{2}$	
D.	$x\sqrt{15}$	

Global Incorrect Feedback

The correct answer is: $5x\sqrt{2x}$.

Question 6c of 15 (3 Multiplying Radicals 295234)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the product below when $x \geq 0$?

$$\sqrt{2x^2} \cdot \sqrt{4x}$$

	Choice	Feedback
A.	$2\sqrt{2x^2}$	
*B.	$2x\sqrt{2x}$	Correct!
C.	$\sqrt{6x}$	
D.	$\sqrt{8x^2}$	

Global Incorrect Feedback

The correct answer is: $2x\sqrt{2x}$.

Question 7a of 15 (3 Multiplying Radicals 92021)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below when $x > 0$?

$$\sqrt{\frac{5}{x^2}} \cdot \sqrt{\frac{x^2}{45}}$$

	Choice	Feedback
A.	$\frac{x}{3}$	
*B.	$\frac{1}{3}$	Correct!
C.	$\frac{1}{9}$	
D.	$\frac{x}{9}$	

Global Incorrect Feedback

The correct answer is: $\frac{1}{3}$.

Question 7b of 15 (3 Multiplying Radicals 295235)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below when $x > 0$?

$$\sqrt{\frac{1}{x^2}} \cdot \sqrt{\frac{x^2}{81}}$$

	Choice	Feedback
A.	$\frac{x}{01}$	
B.	$\frac{1}{81}$	
*C.	$\frac{1}{9}$	Correct!
D.	$\frac{x}{9}$	

Global Incorrect Feedback

The correct answer is: $\frac{1}{9}$.

Question 7c of 15 (3 Multiplying Radicals 295237)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below when $x > 0$?

$$\sqrt{\frac{2}{x}} \cdot \sqrt{\frac{x^2}{18}}$$

	Choice	Feedback
A.	$\frac{x}{3}$	
B.	$\frac{1}{9}$	
*C.	$\frac{1}{3}$	Correct!
D.	$\frac{x}{9}$	

Global Incorrect Feedback
The correct answer is: $\frac{1}{3}$.

Question 8a of 15 (3 Multiplying Radicals 92022)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below when $x > 0$?

$$\sqrt{\frac{6}{x}} \cdot \sqrt{\frac{x^2}{24}}$$

	Choice	Feedback
A.	$\frac{x}{2}$	
B.	$\frac{x}{4}$	

c.	$\frac{\sqrt{x}}{\sqrt{2}}$	
*D.	$\frac{\sqrt{x}}{2}$	Correct!

Global Incorrect Feedback

The correct answer is: $\frac{\sqrt{x}}{2}$.

Question 8b of 15 (3 Multiplying Radicals 295238)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below when $x > 0$?

$$\sqrt{\frac{2}{x}} \cdot \sqrt{\frac{x^2}{8}}$$

	Choice	Feedback
A.	$\frac{x}{2}$	
*B.	$\frac{\sqrt{x}}{2}$	Correct!
C.	$\sqrt{\frac{x}{2}}$	
D.	$\frac{x}{4}$	

Global Incorrect Feedback

The correct answer is: $\frac{\sqrt{x}}{2}$.

Question 8c of 15 (3 Multiplying Radicals 295239)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below when $x > 0$?

$$\sqrt{\frac{3}{x}} \cdot \sqrt{\frac{x^2}{12}}$$

	Choice	Feedback
*A.	$\frac{\sqrt{x}}{2}$	Correct!
B.	$\frac{x}{4}$	
C.	$\frac{\sqrt{x}}{\sqrt{2}}$	
D.	$\frac{x}{2}$	

Global Incorrect Feedback

The correct answer is: $\frac{\sqrt{x}}{2}$.

Question 9a of 15 (1 Multiplying Radicals 117780)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The number $\sqrt{2x}$ is equivalent to $\sqrt{2}x$.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 9b of 15 (1 Multiplying Radicals 295240)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The number $\sqrt{2x}$ is equivalent to $x\sqrt{2}$.

	Choice	Feedback
A.	True	

*B.	False	Correct!
-----	-------	----------

Global Incorrect Feedback
The correct answer is: False.

Question 9c of 15 (1 Multiplying Radicals 295241)

Maximum Attempts: 1
 Question Type: True-False
 Maximum Score: 2

Question: The number $\sqrt{2x}$ is equivalent to $\sqrt{x^2}$.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 10a of 15 (2 Multiplying Radicals 117783)

Maximum Attempts: 1
 Question Type: Multiple Choice
 Maximum Score: 2

Question: If a radical is multiplied by a number or variable, you should put the number or variable _____ the radical sign.

	Choice	Feedback
A.	below	
*B.	before	Correct!
C.	after	
D.	above	

Global Incorrect Feedback
The correct answer is: before.

Question 10b of 15 (2 Multiplying Radicals 295242)

Maximum Attempts: 1
 Question Type: Multiple Choice
 Maximum Score: 2

Question: If a radical is multiplied by a number or variable, you should put the

number or variable _____ the radical sign.

	Choice	Feedback
A.	above	
B.	below	
C.	after	
*D.	before	Correct!

Global Incorrect Feedback

The correct answer is: before.

Question 10c of 15 (2 Multiplying Radicals 295243)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: If a radical is multiplied by a number or variable, you should put the number or variable _____ the radical sign.

	Choice	Feedback
A.	below	
B.	after	
*C.	before	Correct!
D.	above	

Global Incorrect Feedback

The correct answer is: before.

Question 11a of 15 (1 Multiplying Radicals 291658)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: If an original expression is defined for all values of x , you do *not* need to specify the absolute value in the simplified expression.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 11b of 15 (1 Multiplying Radicals 295244)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: If an original expression is defined for all values of x , you do *not* need to specify the absolute value in the simplified expression.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 11c of 15 (1 Multiplying Radicals 295245)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: If an original expression is defined for all values of x , you do *not* need to specify the absolute value in the simplified expression.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 12a of 15 (1 Multiplying Radicals 117785)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The multiplication property works when the radicands are rational expressions.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 12b of 15 (1 Multiplying Radicals 295246)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The multiplication property works when the radicands are rational expressions.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 12c of 15 (1 Multiplying Radicals 295247)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The multiplication property works when the radicands are rational expressions.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 13a of 15 (2 Multiplying Radicals 117786)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What can you say about B if the following statement is true?

$$(\sqrt{B})^2 = B$$

	Choice	Feedback
A.	B must be a negative value.	

B.	B must be a whole number.	
*C.	B must be a nonnegative value.	Correct!
D.	B must be a nonpositive value.	

Global Incorrect Feedback

The correct answer is: B must be a nonnegative value.

Question 13b of 15 (2 Multiplying Radicals 295248)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What can you say about B if the following statement is true?

$$(\sqrt{B})^2 = B$$

	Choice	Feedback
*A.	B must be a nonnegative value.	Correct!
B.	B must be a whole number.	
C.	B must be a negative value.	
D.	B must be a nonpositive value.	

Global Incorrect Feedback

The correct answer is: B must be a nonnegative value.

Question 13c of 15 (2 Multiplying Radicals 295249)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What can you say about B if the following statement is true?

$$(\sqrt{B})^2 = B$$

	Choice	Feedback
A.	B must be a negative value.	
B.	B must be a whole number.	
C.	B must be a nonpositive value.	
*D.	B must be a nonnegative value.	Correct!

Global Incorrect Feedback

The correct answer is: B must be a nonnegative value.

Question 14a of 15 (2 Multiplying Radicals 117788)**Maximum Attempts:** 1**Question Type:** Multiple Choice**Maximum Score:** 2**Question:** Which choice is equivalent to the expression below? Use the FOIL method.

$$(\sqrt{x} + 2)(\sqrt{x} - 3)$$

	Choice	Feedback
A.	$x + \sqrt{x} - 6$	
B.	$x + \sqrt{x} + 6$	
C.	$x - 6$	
*D.	$x - \sqrt{x} - 6$	Correct!

Global Incorrect Feedback

The correct answer is: $x - \sqrt{x} - 6$.

Question 14b of 15 (2 Multiplying Radicals 295250)**Maximum Attempts:** 1**Question Type:** Multiple Choice**Maximum Score:** 2**Question:** Which choice is equivalent to the expression below? Use the FOIL method.

$$(\sqrt{x} - 2)(\sqrt{x} + 3)$$

	Choice	Feedback
*A.	$x + \sqrt{x} - 6$	Correct!
B.	$x + \sqrt{x} + 6$	
C.	$x - 6$	
D.	$x - \sqrt{x} - 6$	

Global Incorrect FeedbackThe correct answer is: $x + \sqrt{x} - 6$.**Question 14c of 15** (2 Multiplying Radicals 295251)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below? Use the FOIL method.

$$(\sqrt{x} + 3)(\sqrt{x} - 4)$$

	Choice	Feedback
A.	$x + \sqrt{x} - 12$	
B.	$x + \sqrt{x} + 12$	
*C.	$x - \sqrt{x} - 12$	Correct!
D.	$x - 12$	

Global Incorrect FeedbackThe correct answer is: $x - \sqrt{x} - 12$.**Question 15a of 15** (2 Multiplying Radicals 117790)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below? Use the FOIL method.

$$(\sqrt{x} - 5)(\sqrt{2x} - 4)$$

	Choice	Feedback
*A.	$x\sqrt{2} - 4\sqrt{x} - 5\sqrt{2x} + 20$	Correct!
B.	$x\sqrt{2} - 5\sqrt{2x} + 20$	
C.	$x\sqrt{2} - 4\sqrt{x} - 5\sqrt{2x} - 20$	
D.	$x\sqrt{2} - 4\sqrt{x} + 20$	

Global Incorrect FeedbackThe correct answer is: $x\sqrt{2} - 4\sqrt{x} - 5\sqrt{2x} + 20$.**Question 15b of 15** (2 Multiplying Radicals 295252)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below? Use the FOIL method.

$$(\sqrt{x} - 4)(\sqrt{2x} - 5)$$

	Choice	Feedback
A.	$x\sqrt{2} - 4\sqrt{x} - 5\sqrt{2x} + 20$	
B.	$x\sqrt{2} - 5\sqrt{2x} + 20$	
*C.	$x\sqrt{2} - 5\sqrt{x} - 4\sqrt{2x} + 20$	Correct!
D.	$x\sqrt{2} - 4\sqrt{x} + 20$	

Global Incorrect FeedbackThe correct answer is: $x\sqrt{2} - 5\sqrt{x} - 4\sqrt{2x} + 20$.**Question 15c of 15** (2 Multiplying Radicals 295253)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the product below? Use the FOIL method.

$$(\sqrt{x} - 5)(\sqrt{2x} + 4)$$

	Choice	Feedback
A.	$x\sqrt{2} - 4\sqrt{x} - 5\sqrt{2x} + 20$	
B.	$x\sqrt{2} - 5\sqrt{2x} + 20$	
*C.	$x\sqrt{2} + 4\sqrt{x} - 5\sqrt{2x} - 20$	Correct!
D.	$x\sqrt{2} - 4\sqrt{x} + 20$	

Global Incorrect Feedback

The correct answer is: $x\sqrt{2} + 4\sqrt{x} - 5\sqrt{2x} - 20$.

ANSWER

CLOSE

Quiz: Dividing Radicals

Question 1a of 14 (2 Dividing Radicals 92157)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which inequality represents all values of x for which the quotient below is defined?

$$\sqrt{7x^2} \div \sqrt{3x}$$

- A. $x > 1$
- B. $x \geq 0$
- C. $x > 0$
- D. $x > -1$

Question 1b of 14 (2 Dividing Radicals 295308)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which inequality represents all values of x for which the quotient below is defined?

$$\sqrt{6x^2} + \sqrt{4x}$$

- A. $x > -1$
- B. $x > 0$
- C. $x \geq 0$
- D. $x > 1$

Question 1c of 14 (2 Dividing Radicals 295309)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which inequality represents all values of x for which the quotient below is defined?

$$\sqrt{9x^2} + \sqrt{2x}$$

- A. $x > 0$
- B. $x \geq 0$
- C. $x > 1$

- D. $x > -1$

Question 2a of 14 (2 Dividing Radicals 92158)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which inequality represents all values of x for which the quotient below is defined?

$$\sqrt{30(x-1)} \div \sqrt{5x^2}$$

- A. $x > 1$
- B. $x < -1$
- C. $x \geq 1$
- D. $x \leq 1$

Question 2b of 14 (2 Dividing Radicals 295310)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which inequality represents all values of x for which the quotient below is defined?

$$\sqrt{28(x-1)} \div \sqrt{8x^2}$$

- A. $x \geq 1$
- B. $x < -1$
- C. $x \leq 1$
- D. $x > 1$

Question 2c of 14 (2 Dividing Radicals 295311)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which inequality represents all values of x for which the quotient below is defined?

$$\sqrt{5x-1} \div \sqrt{x}$$

- A. $x > 1$
- B. $x < -1$

- C. $x^{\frac{1}{3}}$
- D. x^{-1}

Question 3a of 14 (3 Dividing Radicals 92159)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here for acceptable values of x ?

$$\sqrt{7x^2} \div \sqrt{3x}$$

- A. $\sqrt{\frac{7x}{3}}$
- B. $x\sqrt{\frac{7x}{3}}$
- C. $\sqrt{\frac{7x^3}{3}}$
- D. $\sqrt{21x^3}$

Question 3b of 14 (3 Dividing Radicals 295312)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here for acceptable values of x ?

$$\sqrt{8x^3} \div \sqrt{3x}$$

- A. $x\sqrt{\frac{8x}{3}}$
- B. $\sqrt{\frac{8x}{3}}$
- C. $\sqrt{\frac{8x^3}{3}}$
- D. $\sqrt{24x^3}$

Question 3c of 14 (3 Dividing Radicals 295313)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here for acceptable values of x ?

$$\sqrt{9x^3} + \sqrt{5x}$$

- A. $\sqrt{45x^3}$
 - B. $\sqrt{\frac{9x}{5}}$
 - C. $\sqrt{\frac{9x^3}{5}}$
 - D. $x\sqrt{\frac{9x}{5}}$
-

Question 4a of 14 (3 Dividing Radicals 92160)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here for acceptable values of x ?

$$\sqrt{30(x-1)} \div \sqrt{5(x-1)^2}$$

- A. $\sqrt{6(x-1)}$
 - B. $\sqrt{30(x-1) - 5(x-1)^2}$
 - C. $\sqrt{150(x-1)^3}$
 - D. $\sqrt{\frac{6}{(x-1)}}$
-

Question 4b of 14 (3 Dividing Radicals 295314)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here for acceptable values of x ?

$$\sqrt{25x^3} + \sqrt{5x^3}$$

- A. $\sqrt{\frac{5}{(x-1)}}$
- B. $\sqrt{25(x-1)^3}$

- C. $\sqrt{3(x-1)^2}$
 - D. $\sqrt{5(x-1)^2}$
-

Question 4c of 14 (3 Dividing Radicals 295315)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here for acceptable values of x ?

$$\sqrt{12(x-1)} \div \sqrt{2(x-1)^2}$$

- A. $\sqrt{6(x-1)}$
 - B. $\sqrt{3(x-1)}$
 - C. $\sqrt{\frac{6}{(x-1)}}$
 - D. $\sqrt{24(x-1)^3}$
-

Question 5a of 14 (3 Dividing Radicals 92161)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x > 0$?

$$\sqrt{14x^3} \div \sqrt{7x}$$

- A. $x^2\sqrt{2}$
 - B. $2x$
 - C. $\sqrt{2x}$
 - D. $x\sqrt{2}$
-

Question 5b of 14 (3 Dividing Radicals 295316)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x > 0$?

$$\sqrt{16x^2} \div \sqrt{4x}$$

- A. $x^2\sqrt{2}$
 - B. $x\sqrt{2}$
 - C. $\sqrt{2x}$
 - D. $2x$
-

Question 5c of 14 (3 Dividing Radicals 295318)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x > 0$?

$$\sqrt{16x^3} \div \sqrt{8x}$$

- A. $x\sqrt{2}$
 - B. $x^2\sqrt{2}$
 - C. $\sqrt{2x}$
 - D. $2x$
-

Question 6a of 14 (3 Dividing Radicals 92162)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x > 0$?

$$\sqrt{35x^5} \div \sqrt{7x^3}$$

- A. $x\sqrt{5}$
 - B. $5x$
 - C. $x^2\sqrt{5}$
 - D. $5x^2$
-

Question 6b of 14 (3 Dividing Radicals 295320)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x > 0$?

$$\sqrt{7x^2} \div \sqrt{7}$$

- A. $x^2\sqrt{7}$
 - B. $7x$
 - C. $7x^2$
 - D. $x\sqrt{7}$
-

Question 6c of 14 (3 Dividing Radicals 295321)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x > 0$?

$$\sqrt{2x^2} \div \sqrt{2}$$

- A. $2x$
 - B. $x^2\sqrt{2}$
 - C. $x\sqrt{2}$
 - D. $2x^2$
-

Question 7a of 14 (3 Dividing Radicals 92163)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x \geq 0$?

$$\sqrt{18x} \div \sqrt{32}$$

- A. $\frac{3\sqrt{x}}{8}$
 - B. $\sqrt{18x-32}$
 - C. $\frac{3\sqrt{x}}{4}$
 - D. $\sqrt{\frac{x}{14}}$
-

Question 7b of 14 (3 Dividing Radicals 295323)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x \geq 0$?

$$\frac{\sqrt{45x} + \sqrt{45}}{\sqrt{3x} + \sqrt{3}}$$

- A. $\frac{3\sqrt{x}}{5}$
 - B. $\frac{3\sqrt{x}}{10}$
 - C. $\sqrt{\frac{x}{20}}$
 - D. $\sqrt{15x-50}$
-

Question 7c of 14 (3 Dividing Radicals 295325)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x \geq 0$?

$$\frac{\sqrt{27x} + \sqrt{48}}{\sqrt{3x} + \sqrt{48}}$$

- A. $\sqrt{18x-32}$
 - B. $\frac{3\sqrt{x}}{8}$
 - C. $\sqrt{\frac{x}{14}}$
 - D. $\frac{3\sqrt{x}}{4}$
-

Question 8a of 14 (3 Dividing Radicals 92164)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x > 0$?

$$\sqrt{72x^3} \div \sqrt{50x^2}$$

- A. $\frac{6\sqrt{x}}{5}$
 - B. $\sqrt{22x}$
 - C. $\frac{6x}{5}$
 - D. $\sqrt{72x^3 - 50x^2}$
-

Question 8b of 14 (3 Dividing Radicals 295327)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x > 0$?

$$\frac{\sqrt{6x^3} + \sqrt{2x^3}}{\sqrt{6x^3} - \sqrt{2x^3}}$$

- A. $\sqrt{6x^3 - 72x^2}$
 - B. $\sqrt{26x}$
 - C. $\frac{7\sqrt{x}}{6}$
 - D. $\frac{7x}{6}$
-

Question 8c of 14 (3 Dividing Radicals 295328)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice is equivalent to the quotient shown here when $x > 0$?

$$\frac{\sqrt{6x^3} + \sqrt{2x^3}}{\sqrt{6x^3} - \sqrt{2x^3}}$$

- A. $\sqrt{13x}$
 - B. $\sqrt{6x^3 - 32x^2}$
 - C. $\frac{5x}{4}$
 - D. $\frac{5\sqrt{x}}{4}$
-

Question 9a of 14 (1 Dividing Radicals 117792)

1 attempt (2 points possible)

True-False: Please select true or false and click "submit."

Before the possible values of x for a quotient of radical expressions can be determined, each radicand's possible values of x must be considered.

- A. True
 - B. False
-

Question 9b of 14 (1 Dividing Radicals 295329)

1 attempt (2 points possible)

True-False: Please select true or false and click "submit."

Before the possible values of x for a quotient of radical expressions can be determined, each radicand's possible values of x must be considered.

- A. True
 - B. False
-

Question 9c of 14 (1 Dividing Radicals 295330)

1 attempt (2 points possible)

True-False: Please select true or false and click "submit."

Before the possible values of x for a quotient of radical expressions can be determined, each radicand's possible values of x must be considered.

- A. True
 - B. False
-

Question 10a of 14 (2 Dividing Radicals 117793)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{x+3}$$

- A. $x > 3$
- B. $x \geq -3$
- C. $x \leq 3$

- D. $x \leq -3$

Question 10b of 14 (2 Dividing Radicals 295334)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{x+4}$$

- A. $x > 4$
- B. $x \geq 4$
- C. $x \leq -4$
- D. $x \geq -4$

Question 10c of 14 (2 Dividing Radicals 295335)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{x+5}$$

- A. $x > 5$
- B. $x \geq -5$
- C. $x \leq 5$
- D. $x \geq -5$

Question 11a of 14 (2 Dividing Radicals 117796)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{1-x}$$

- A. $x > 1$
 - B. $x > -1$
 - C. $x > 1$
 - D. $x < 1$
-

Question 11b of 14 (2 Dividing Radicals 295338)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{2-x}$$

- A. $x > 2$
 - B. $x > -2$
 - C. $x < 2$
 - D. $x < -2$
-

Question 11c of 14 (2 Dividing Radicals 295339)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{3-x}$$

- A. $x > 3$
 - B. $x < 3$
 - C. $x > -3$
 - D. $x < 3$
-

Question 12a of 14 (2 Dividing Radicals 117799)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{x+3} \div \sqrt{1-x}$$

- A. $3 > x > 1$

- B. $3 > x > 1$
- C. $-3 > x < 1$
- D. $3 > x < -1$

Question 12b of 14 (2 Dividing Radicals 295341)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{x+4} + \sqrt{x}$$

- A. $-4 > x < 1$
- B. $4 > x > 1$
- C. $4 > x > 1$
- D. $4 > x < -1$

Question 12c of 14 (2 Dividing Radicals 295343)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{x+5} + \sqrt{-x}$$

- A. $5 > x > 1$
- B. $5 > x > 1$
- C. $5 > x < -1$
- D. $-5 > x < 1$

Question 13a of 14 (2 Dividing Radicals 117801)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{2x^2} \div \sqrt{5x}$$

- A. $x = 0$
 - B. $x < 0$
 - C. $x < 1$
 - D. $x > 0$
-

Question 13b of 14 (2 Dividing Radicals 295345)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{3x} + \sqrt{4x}$$

- A. $x = 0$
 - B. $x < 0$
 - C. $x < 1$
 - D. $x > 0$
-

Question 13c of 14 (2 Dividing Radicals 295346)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

For what values of x is the expression below defined?

$$\sqrt{4x} + \sqrt{3x}$$

- A. $x = 0$
 - B. $x < 0$
 - C. $x < 1$
 - D. $x > 0$
-

Question 14a of 14 (3 Dividing Radicals 117826)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice represents the simplified form of the expression below and the values of x for which it is defined?

$$\sqrt{3x^3} \div \sqrt{x}$$

- A. $x\sqrt{3}$ when $x > 0$
 - B. $x\sqrt{3}$ when $x > 1$
 - C. $x\sqrt{3}$ when $x < 0$
 - D. $x\sqrt{2x}$ when $x > 0$
-

Question 14b of 14 (3 Dividing Radicals 295348)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice represents the simplified form of the expression below and the values of x for which it is defined?

$$\sqrt{5x^2} + \sqrt{x}$$

- A. $x\sqrt{5}$ when $x < 0$
 - B. $x\sqrt{5}$ when $x > 1$
 - C. $x\sqrt{5}$ when $x > 0$
 - D. $x\sqrt{2x}$ when $x > 0$
-

Question 14c of 14 (3 Dividing Radicals 295350)

1 attempt (2 points possible)

Multiple Choice: Please select the best answer and click "submit."

Which choice represents the simplified form of the expression below and the values of x for which it is defined?

$$\sqrt{7x^2} + \sqrt{x}$$

- A. $x\sqrt{7}$ when $x > 1$
 - B. $x\sqrt{7}$ when $x > 0$
 - C. $x\sqrt{7}$ when $x < 0$
 - D. $x\sqrt{2x}$ when $x > 0$
-

PREVIEW

CLOSE

Quiz: Adding and Subtracting Radicals

Question 1a of 15 (3 Adding and Subtracting Radicals 92023)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{28} + 8\sqrt{7}$$

	Choice	Feedback
A.	$9\sqrt{35}$	
B.	$8\sqrt{35}$	
C.	$12\sqrt{7}$	
*D.	$10\sqrt{7}$	Correct!

Global Incorrect FeedbackThe correct answer is: $10\sqrt{7}$.**Question 1b of 15** (3 Adding and Subtracting Radicals 295475)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{45} + 8\sqrt{5}$$

	Choice	Feedback
A.	$9\sqrt{15}$	
B.	$8\sqrt{45}$	
*C.	$11\sqrt{5}$	Correct!
D.	$10\sqrt{5}$	

Global Incorrect FeedbackThe correct answer is: $11\sqrt{5}$.**Question 1c of 15** (3 Adding and Subtracting Radicals 295476)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{20} + 8\sqrt{5}$$

	Choice	Feedback
*A.	$10\sqrt{5}$	Correct!
B.	$3\sqrt{5}$	
C.	$2\sqrt{5}$	
D.	$9\sqrt{25}$	

Global Incorrect FeedbackThe correct answer is: $10\sqrt{5}$.**Question 2a of 15** (3 Adding and Subtracting Radicals 92024)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{50} - \sqrt{2}$$

	Choice	Feedback
*A.	$4\sqrt{2}$	Correct!
B.	$\sqrt{48}$	
C.	5	

D.	$24\sqrt{2}$	
----	--------------	--

Global Incorrect Feedback

The correct answer is: $4\sqrt{2}$.

Question 2b of 15 (3 Adding and Subtracting Radicals 295477)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{12} - \sqrt{6}$$

	Choice	Feedback
A.	$\sqrt{30}$	
*B.	$3\sqrt{2}$	Correct!
C.	4	
D.	$16\sqrt{5}$	

Global Incorrect Feedback

The correct answer is: $3\sqrt{2}$.

Question 2c of 15 (3 Adding and Subtracting Radicals 295478)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{16} - \sqrt{2}$$

	Choice	Feedback
A.	3	
B.	$\sqrt{16}$	

*C.	$2\sqrt{2}$	Correct!
D.	$16\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $2\sqrt{2}$.

Question 3a of 15 (3 Adding and Subtracting Radicals 92025)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$5\sqrt{10} + \sqrt{40} + \sqrt{90}$$

	Choice	Feedback
A.	$7\sqrt{10}$	
B.	$18\sqrt{10}$	
C.	$13\sqrt{10}$	
*D.	$10\sqrt{10}$	Correct!

Global Incorrect Feedback

The correct answer is: $10\sqrt{10}$.

Question 3b of 15 (3 Adding and Subtracting Radicals 295479)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{40}\sqrt{10} + \sqrt{40}$$

	Choice	Feedback
A.	$7\sqrt{10}$	
B.	$18\sqrt{10}$	

*C.	$13\sqrt{10}$	Correct!
D.	$10\sqrt{10}$	

Global Incorrect Feedback

The correct answer is: $13\sqrt{10}$.

Question 3c of 15 (3 Adding and Subtracting Radicals 295480)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$7\sqrt{10} + 4\sqrt{10}$$

	Choice	Feedback
*A.	$7\sqrt{10}$	Correct!
B.	$18\sqrt{10}$	
C.	$13\sqrt{10}$	
D.	$10\sqrt{10}$	

Global Incorrect Feedback

The correct answer is: $7\sqrt{10}$.

Question 4a of 15 (3 Adding and Subtracting Radicals 92026)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{27} - \sqrt{12} + \sqrt{48}$$

	Choice	Feedback
A.	$29\sqrt{3}$	
B.	$21\sqrt{3}$	
C.	$9\sqrt{3}$	

*D.	$5\sqrt{3}$	
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Global Incorrect Feedback

The correct answer is: $5\sqrt{3}$.

Question 4b of 15 (3 Adding and Subtracting Radicals 295481)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{2} - \sqrt{2} + \sqrt{5}$$

	Choice	Feedback
*A.	$4\sqrt{3}$	Correct!
B.	$21\sqrt{3}$	
C.	$9\sqrt{3}$	
D.	$5\sqrt{3}$	

Global Incorrect Feedback

The correct answer is: $4\sqrt{3}$.

Question 4c of 15 (3 Adding and Subtracting Radicals 295482)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{2} - \sqrt{2} + \sqrt{5}$$

	Choice	Feedback
*A.	$4\sqrt{5}$	Correct!
B.	$5\sqrt{5}$	

C.	$0\sqrt{5}$	
D.	$3\sqrt{5}$	

Global Incorrect Feedback

The correct answer is: $4\sqrt{5}$.

Question 5a of 15 (3 Adding and Subtracting Radicals 92027)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$4\sqrt{7} - 3x\sqrt{7} - x\sqrt{7}$$

	Choice	Feedback
A.	$-x^2$	
*B.	$4\sqrt{7} - 4x\sqrt{7}$	Correct!
C.	0	
D.	$-2x\sqrt{7}$	

Global Incorrect Feedback

The correct answer is: $4\sqrt{7} - 4x\sqrt{7}$.

Question 5b of 15 (3 Adding and Subtracting Radicals 295483)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$5\sqrt{7} - 4\sqrt{7} - x\sqrt{7}$$

	Choice	Feedback
A.	$-x^2$	
B.	0	
*C.	$5\sqrt{7} - 5x\sqrt{7}$	Correct!

D.	$-2x\sqrt{7}$	
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Global Incorrect Feedback

The correct answer is: $5\sqrt{7} - 5x\sqrt{7}$.

Question 5c of 15 (3 Adding and Subtracting Radicals 295484)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$6\sqrt{7} - 6x\sqrt{7}$$

	Choice	Feedback
A.	$-x^2$	
B.	$-2x\sqrt{7}$	
C.	0	
*D.	$6\sqrt{7} - 6x\sqrt{7}$	Correct!

Global Incorrect Feedback

The correct answer is: $6\sqrt{7} - 6x\sqrt{7}$.

Question 6a of 15 (3 Adding and Subtracting Radicals 92028)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$5x\sqrt{2} - 3\sqrt{2} + x\sqrt{2}$$

	Choice	Feedback
A.	$3x\sqrt{2}$	
*B.	$6x\sqrt{2} - 3\sqrt{2}$	Correct!
C.	$2x^2\sqrt{2}$	

D.	$5x^2\sqrt{2}$	
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Global Incorrect Feedback

The correct answer is: $6x\sqrt{2} - 3\sqrt{2}$.

Question 6b of 15 (3 Adding and Subtracting Radicals 295485)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$7x\sqrt{2} - 2\sqrt{2}$$

	Choice	Feedback
A.	$3x\sqrt{2}$	
B.	$7x^2\sqrt{2}$	
C.	$2x^2\sqrt{2}$	
*D.	$7x\sqrt{2} - 2\sqrt{2}$	Correct!

Global Incorrect Feedback

The correct answer is: $7x\sqrt{2} - 2\sqrt{2}$.

Question 6c of 15 (3 Adding and Subtracting Radicals 295486)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$8x\sqrt{2} - 4\sqrt{2}$$

	Choice	Feedback
*A.	$8x\sqrt{2} - 4\sqrt{2}$	Correct!
B.	$6x\sqrt{2} - 3\sqrt{2}$	

C.	$5x^2\sqrt{2}$	
D.	$3x\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $8x\sqrt{2}-4\sqrt{2}$.

Question 7a of 15 (3 Adding and Subtracting Radicals 92029)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the expression below when $y \geq 0$?

$$\sqrt{y^3} + \sqrt{9y^3} - 3y\sqrt{y}$$

	Choice	Feedback
A.	$\sqrt{10y^3} - 3y\sqrt{y}$	
B.	$y\sqrt{10y} - 3y\sqrt{y}$	
C.	$-2y\sqrt{11y}$	
*D.	$y\sqrt{y}$	Correct!

Global Incorrect Feedback

The correct answer is: $y\sqrt{y}$.

Question 7b of 15 (3 Adding and Subtracting Radicals 295487)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the expression below when $y \geq 0$?

$$\sqrt{y^2} + \sqrt{y^2} - 4\sqrt{y}$$

	Choice	Feedback
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A.	$\sqrt{5y} - 2y\sqrt{y}$	
B.	$y\sqrt{5y} - 2y\sqrt{y}$	
*C.	$y\sqrt{5y}$	Correct!
D.	$-y\sqrt{5y}$	

Global Incorrect Feedback

The correct answer is: $y\sqrt{5y}$.

Question 7c of 15 (3 Adding and Subtracting Radicals 295488)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the expression below when $y \geq 0$?

$$\sqrt{5y} - 2y\sqrt{y}$$

	Choice	Feedback
A.	$\sqrt{5y} - 4y\sqrt{y}$	
*B.	$y\sqrt{5y}$	Correct!
C.	$y\sqrt{5y} - 4y\sqrt{y}$	
D.	$-3y\sqrt{5y}$	

Global Incorrect Feedback

The correct answer is: $y\sqrt{5y}$.

Question 8a of 15 (3 Adding and Subtracting Radicals 92030)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the expression below when $x \geq 0$?

$$\sqrt{50x^3} - \sqrt{25x^3} + 5\sqrt{x^3} - \sqrt{2x^3}$$

	Choice	Feedback
A.	$5\sqrt{2x}$	
*B.	$4x\sqrt{2x}$	Correct!
C.	$4\sqrt{x}$	
D.	$28\sqrt{x^3}$	

Global Incorrect Feedback

The correct answer is: $4x\sqrt{2x}$.

Question 8b of 15 (3 Adding and Subtracting Radicals 295489)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the expression below when $x \geq 0$?

$$\sqrt{18x^3} - \sqrt{2x^3} + \sqrt{2x^3}$$

	Choice	Feedback
A.	$3\sqrt{2x}$	
B.	$4x\sqrt{2x}$	
*C.	$3x\sqrt{2x}$	Correct!
D.	$\sqrt{18x^3}$	

Global Incorrect Feedback

The correct answer is: $3x\sqrt{2x}$.

Question 8c of 15 (3 Adding and Subtracting Radicals 295490)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question:

Which choice is equivalent to the expression below when $x \geq 0$?



	Choice	Feedback
*A.	$2x\sqrt{2x}$	Correct!
B.	$2\sqrt{2x}$	
C.	$4\sqrt{x}$	
D.	$\sqrt{10x^2}$	

Global Incorrect Feedback

The correct answer is: $2x\sqrt{2x}$.

Question 9a of 15 (1 Adding and Subtracting Radicals 117952)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2

Question: You can add radical expressions by combining like terms and then adding them together.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 9b of 15 (1 Adding and Subtracting Radicals 295491)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2

Question: You can add radical expressions by combining like terms and then

adding them together.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 9c of 15 (1 Adding and Subtracting Radicals 295492)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: You can add radical expressions by combining like terms and then adding them together.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 10a of 15 (1 Adding and Subtracting Radicals 117954)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Two radical expressions are called like terms if they have the same degree and the same _____.

	Choice	Feedback
A.	number	
B.	radical	
*C.	radicand	Correct!
D.	term	
E.	denominator	

Global Incorrect Feedback

The correct answer is: radicand.

Question 10b of 15 (1 Adding and Subtracting Radicals 295493)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Two radical expressions with the same degree and the same _____ are called like terms.

	Choice	Feedback
A.	number	
*B.	radicand	Correct!
C.	radical	
D.	term	
E.	denominator	

Global Incorrect Feedback

The correct answer is: radicand.

Question 10c of 15 (1 Adding and Subtracting Radicals 295494)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Two radical expressions are called like terms if they have the same degree and the same _____.

	Choice	Feedback
A.	number	
B.	radical	
C.	denominator	
D.	term	
*E.	radicand	Correct!

Global Incorrect Feedback

The correct answer is: radicand.

Question 11a of 15 (2 Adding and Subtracting Radicals 117958)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: If you need to add radical expressions that have different radicands, you should determine whether you can subtract a radical expression

and then combine like terms.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 11b of 15 (2 Adding and Subtracting Radicals 295495)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: If you need to add radical expressions that have different radicands, you should determine whether you can subtract a radical expression and then combine like terms.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 11c of 15 (2 Adding and Subtracting Radicals 295496)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: If you need to add radical expressions that have different radicands, you should determine whether you can subtract a radical expression and then combine like terms.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 12a of 15 (3 Adding and Subtracting Radicals 117960)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{20} + \sqrt{45}$$

	Choice	Feedback
A.	$-5\sqrt{5}$	
*B.	$5\sqrt{5}$	Correct!
C.	$\sqrt{5}$	
D.	25	

Global Incorrect Feedback

The correct answer is: $5\sqrt{5}$.

Question 12b of 15 (3 Adding and Subtracting Radicals 295497)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{20} + \sqrt{80}$$

	Choice	Feedback
A.	$-5\sqrt{5}$	
B.	25	
C.	$\sqrt{5}$	
*D.	$6\sqrt{5}$	Correct!

Global Incorrect Feedback

The correct answer is: $6\sqrt{5}$.

Question 12c of 15 (3 Adding and Subtracting Radicals 295498)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{45} + \sqrt{125}$$

	Choice	Feedback
*A.	$8\sqrt{5}$	Correct!
B.	$-8\sqrt{5}$	
C.	$\sqrt{5}$	
D.	25	

Global Incorrect Feedback

The correct answer is: $8\sqrt{5}$.

Question 13a of 15 (3 Adding and Subtracting Radicals 117970)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$3\sqrt{3} + \sqrt{12}$$

	Choice	Feedback
A.	$3\sqrt{3}$	
B.	$5\sqrt{2}$	
*C.	$5\sqrt{3}$	Correct!
D.	$3\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $5\sqrt{3}$.

Question 13b of 15 (3 Adding and Subtracting Radicals 295499)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?.

$$5\sqrt{3} + 4\sqrt{2}$$

	Choice	Feedback
*A.	$7\sqrt{3}$	Correct!
B.	$5\sqrt{2}$	
C.	$5\sqrt{3}$	
D.	$7\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $7\sqrt{3}$.

Question 13c of 15 (3 Adding and Subtracting Radicals 295500)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?.

$$2\sqrt{2} + \sqrt{8}$$

	Choice	Feedback
A.	$7\sqrt{3}$	
*B.	$5\sqrt{2}$	Correct!
C.	$5\sqrt{3}$	
D.	$1\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $5\sqrt{2}$.

Question 14a of 15 (3 Adding and Subtracting Radicals 117972)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$3\sqrt{2} + \sqrt{8} + \sqrt{18}$$

	Choice	Feedback
A.	$6\sqrt{2}$	
B.	$4\sqrt{2}$	
C.	$3\sqrt{2}$	
*D.	$8\sqrt{2}$	Correct!

Global Incorrect Feedback

The correct answer is: $8\sqrt{2}$.

Question 14b of 15 (3 Adding and Subtracting Radicals 295501)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$2\sqrt{2} + \sqrt{8} + \sqrt{6}$$

	Choice	Feedback
A.	$6\sqrt{2}$	
B.	$8\sqrt{2}$	
*C.	$7\sqrt{2}$	Correct!
D.	$4\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $7\sqrt{2}$.

Question 14c of 15 (3 Adding and Subtracting Radicals 295502)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$2\sqrt{18} - \sqrt{2}$$

	Choice	Feedback
A.	$6\sqrt{2}$	
B.	$4\sqrt{2}$	
*C.	$9\sqrt{2}$	Correct!
D.	$8\sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $9\sqrt{2}$.

Question 15a of 15 (3 Adding and Subtracting Radicals 117976)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$4x\sqrt{19} + \sqrt{20x^3} - 3x\sqrt{76}$$

	Choice	Feedback
*A.	$2x(\sqrt{5x} - \sqrt{19})$	Correct!
B.	$\sqrt{5x} - \sqrt{19}$	
C.	$2x\sqrt{5x}$	
D.	$2x\sqrt{19}$	

Global Incorrect Feedback

The correct answer is: $2x(\sqrt{5x} - \sqrt{19})$.

Question 15b of 15 (3 Adding and Subtracting Radicals 295503)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$4x\sqrt{19} + \sqrt{20x^3} - 3x\sqrt{76}$$

	Choice	Feedback
A.	$2x\sqrt{5x}$	
B.	$\sqrt{5x} - \sqrt{19}$	
*C.	$2x(\sqrt{5x} - \sqrt{19})$	Correct!
D.	$2x\sqrt{19}$	

Global Incorrect Feedback

The correct answer is: $2x(\sqrt{5x} - \sqrt{19})$.

Question 15c of 15 (3 Adding and Subtracting Radicals 295504)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the expression below?

$$\sqrt{5x} - \sqrt{19}$$

	Choice	Feedback
A.	$2x\sqrt{19}$	
B.	$\sqrt{5x} - \sqrt{19}$	
C.	$2x\sqrt{5x}$	
*D.	$2x(\sqrt{5x} - \sqrt{19})$	Correct!

Global Incorrect Feedback

The correct answer is: $2x(\sqrt{5x} - \sqrt{19})$.

PREVIEW

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Quiz: Rationalizing Denominators

Question 1a of 15 (2 Rationalizing Denominators 92031)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is the conjugate of the expression below when $x \geq 6$?

$$\sqrt{x-6}-3$$

	Choice	Feedback
A.	$\sqrt{x-6}-3$	
B.	$\sqrt{x+6}+3$	
*C.	$\sqrt{x-6}+3$	Correct!
D.	$\sqrt{x+6}-3$	

Global Incorrect Feedback

The correct answer is: $\sqrt{x-6}+3$.

Question 1b of 15 (2 Rationalizing Denominators 295557)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is the conjugate of the expression below when $x \geq 5$?

$$\sqrt{x-5}-2$$

	Choice	Feedback
A.	$\sqrt{x+5}+2$	
B.	$\sqrt{x-5}-2$	

C.	$\sqrt{x+5}-2$	
*D.	$\sqrt{x-5}+2$	Correct!

Global Incorrect Feedback

The correct answer is: $\sqrt{x-5}+2$.

Question 1c of 15 (2 Rationalizing Denominators 295558)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is the conjugate of the expression below when $x \geq 4$?

$$\sqrt{x-4}-5$$

	Choice	Feedback
*A.	$\sqrt{x-4}+5$	Correct!
B.	$\sqrt{x+4}-5$	
C.	$\sqrt{x+4}+5$	
D.	$\sqrt{x-4}-5$	

Global Incorrect Feedback

The correct answer is: $\sqrt{x-4}+5$.

Question 2a of 15 (2 Rationalizing Denominators 92032)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is the conjugate of the expression below when $x \geq -4$?

$$5 - \sqrt{x+4}$$

	Choice	Feedback
*A.	$5 + \sqrt{x+4}$	Correct!
B.	$5 - \sqrt{x+4}$	
C.	$5 + \sqrt{x-4}$	
D.	$5 - \sqrt{x-4}$	

Global Incorrect Feedback

The correct answer is: $5 + \sqrt{x+4}$.


Question 2b of 15 (2 Rationalizing Denominators 295559)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is the conjugate of the expression below when x  -4?

$$4 - \sqrt{x+5}$$

	Choice	Feedback
A.	$4 - \sqrt{x+5}$	
B.	$4 - \sqrt{x-5}$	
*C.	$4 + \sqrt{x+5}$	Correct!
D.	$4 + \sqrt{x-5}$	

Global Incorrect Feedback

The correct answer is: $4 + \sqrt{x+5}$.

Question 2c of 15 (2 Rationalizing Denominators 295560)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is the conjugate of the expression below when $x \geq -4$?

$$5 - \sqrt{x+4}$$

	Choice	Feedback
*A.	$5 + \sqrt{x+4}$	Correct!
B.	$5 - \sqrt{x+4}$	
C.	$5 + \sqrt{x-4}$	
D.	$5 - \sqrt{x-4}$	

Global Incorrect Feedback

The correct answer is: $5 + \sqrt{x+4}$.

Question 3a of 15 (3 Rationalizing Denominators 92033)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 19

Question: Rationalize the denominator of the fraction and enter the new denominator below.

$$\frac{5}{5 + \sqrt{6}}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 19.

Question 3b of 15 (3 Rationalizing Denominators 295561)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 11

Question: Rationalize the denominator of the fraction and enter the new denominator below.

$$\frac{4}{4 + \sqrt{5}}$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 11.

Question 3c of 15 (3 Rationalizing Denominators 295562)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 31

Question: Rationalize the denominator of the fraction and enter the new denominator below.

$$\frac{6}{6 + \sqrt{5}}$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 31.

Question 4a of 15 (3 Rationalizing Denominators 92034)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -2

Question: Rationalize the denominator of the fraction and enter the new denominator below.

$$\frac{7}{3 - \sqrt{11}}$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: -2.

Question 4b of 15 (3 Rationalizing Denominators 295563)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -8

Question: Rationalize the denominator of the fraction and enter the new denominator below.

$$\frac{8}{2 - \sqrt{12}}$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: -8.

Question 4c of 15 (3 Rationalizing Denominators 295564)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -4

Question: Rationalize the denominator of the fraction and enter the new denominator below.

$$\frac{6}{3 - \sqrt{13}}$$

Attempt	Incorrect Feedback
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1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: -4.

Question 5a of 15 (3 Rationalizing Denominators 92035)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the fraction below when x is an appropriate value? *Hint: Rationalize the denominator and simplify.*

$$\frac{3}{3 - \sqrt{6x}}$$

	Choice	Feedback
A.	$\frac{3 + \sqrt{6x}}{9 - 2x}$	
*B.	$\frac{3 + \sqrt{6x}}{3 - 2x}$	Correct!
C.	$\frac{3 + \sqrt{6x}}{3 - 6x}$	
D.	$\frac{3 + \sqrt{6x}}{9 - 6x}$	

Global Incorrect Feedback

The correct answer is: $\frac{3 + \sqrt{6x}}{3 - 2x}$.

Question 5b of 15 (3 Rationalizing Denominators 295566)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the fraction below when x is an appropriate value? *Hint: Rationalize the denominator and simplify.*

$$\frac{2}{2-\sqrt{6}x}$$

	Choice	Feedback
*A.	$\frac{2+\sqrt{6}x}{2-3x}$	Correct!
B.	$\frac{2+\sqrt{6}x}{2-6x}$	
C.	$\frac{2+\sqrt{6}x}{4-5x}$	
D.	$\frac{2+\sqrt{6}x}{4-3x}$	

Global Incorrect Feedback

The correct answer is: $\frac{2+\sqrt{6}x}{2-3x}$.

Question 5c of 15 (3 Rationalizing Denominators 295567)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the fraction below when x is an appropriate value? *Hint: Rationalize the denominator and simplify.*

$$\frac{4}{4-\sqrt{6}x}$$

	Choice	Feedback
A.	$\frac{E+2\sqrt{E}x}{8-6x}$	
B.	$\frac{E+2\sqrt{E}x}{9-6x}$	
C.	$\frac{2+\sqrt{6}x}{4-5x}$	
*D.	$\frac{E+2\sqrt{E}x}{8-3x}$	Correct!

Global Incorrect Feedback

The correct answer is: $\frac{E+2\sqrt{E}x}{8-3x}$.

Question 6a of 15 (3 Rationalizing Denominators 92036)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the fraction below when x is an appropriate value? *Hint: r]Rationalize the denominator and simplify.*

$$\frac{5}{5 + \sqrt{10x}}$$

	Choice	Feedback
*A.	$\frac{5 - \sqrt{10x}}{5 - 2x}$	Correct!
B.	$\frac{5 - \sqrt{10x}}{5 - 10x}$	
C.	$\frac{5 - \sqrt{10x}}{25 - 2x}$	
D.	$\frac{5 - \sqrt{10x}}{25 - 10x}$	

Global Incorrect Feedback

The correct answer is: $\frac{5 - \sqrt{10x}}{5 - 2x}$.

Question 6b of 15 (3 Rationalizing Denominators 295568)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the fraction below when x is an appropriate value? *Hint: Rationalize the denominator and simplify.*

$$\frac{6}{6 + \sqrt{12x}}$$

	Choice	Feedback
A.	$\frac{6 - \sqrt{12x}}{7 - 12x}$	
B.	$\frac{6 - \sqrt{12x}}{36 - 12x}$	
C.	$\frac{6 - \sqrt{12x}}{36 - 6x}$	

*D.	$\frac{6-\sqrt{12x}}{6-2x}$	Correct!
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Global Incorrect Feedback
The correct answer is: $\frac{6-\sqrt{12x}}{6-2x}$.

Question 6c of 15 (3 Rationalizing Denominators 295569)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the fraction below when x is an appropriate value? *Hint: Rationalize the denominator and simplify.*

$$\frac{7}{7+\sqrt{14x}}$$

	Choice	Feedback
*A.	$\frac{7-\sqrt{14x}}{7-2x}$	Correct!
B.	$\frac{7-\sqrt{14x}}{49-2x}$	
C.	$\frac{7-\sqrt{14x}}{7-14x}$	
D.	$\frac{7-\sqrt{14x}}{49-14x}$	

Global Incorrect Feedback
The correct answer is: $\frac{7-\sqrt{14x}}{7-2x}$.

Question 7a of 15 (3 Rationalizing Denominators 92037)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the fraction below when $x \geq 1$? *Hint: Rationalize the denominator and simplify.*

$$\frac{1}{\sqrt{x}-\sqrt{x-1}}$$

	Choice	Feedback
A.	$-\sqrt{x} - \sqrt{x-1}$	
*B.	$\sqrt{x} + \sqrt{x-1}$	Correct!
C.	$\sqrt{x} - \sqrt{x-1}$	
D.	$\frac{\sqrt{x} + \sqrt{x-1}}{2x-1}$	

Global Incorrect Feedback

The correct answer is: $\sqrt{x} + \sqrt{x-1}$.

Question 7b of 15 (3 Rationalizing Denominators 295570)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the fraction below when $x \geq 1$? *Hint: Rationalize the denominator and simplify.*

$$\frac{1}{\sqrt{x} - \sqrt{x-1}}$$

	Choice	Feedback
A.	$-\sqrt{x-1} - \sqrt{x}$	
*B.	$\sqrt{x} + \sqrt{x-1}$	Correct!
C.	$\sqrt{x} - \sqrt{x-1}$	
D.	$\frac{\sqrt{x} + \sqrt{x-1}}{2x-1}$	

Global Incorrect Feedback

The correct answer is: $\sqrt{x} + \sqrt{x-1}$.

Question 7c of 15 (3 Rationalizing Denominators 295572)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the fraction below when $x \geq 1$? *Hint: Rationalize the denominator and simplify.*

$$\frac{1}{\sqrt{x} - \sqrt{x-1}}$$

	Choice	Feedback
A.	$-\sqrt{x} - \sqrt{x-1}$	
*B.	$\sqrt{x} + \sqrt{x-1}$	
C.	$\sqrt{x-1} - \sqrt{x}$	
D.	$\frac{\sqrt{x} + \sqrt{x-1}}{2x-1}$	

Global Incorrect Feedback

The correct answer is: $\sqrt{x} + \sqrt{x-1}$.

Question 8a of 15 (3 Rationalizing Denominators 92038)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the fraction below when $x \geq 2$? *Hint: Rationalize the denominator and simplify.*

$$\frac{4}{\sqrt{x} - \sqrt{x-2}}$$

	Choice	Feedback
A.	$-2(\sqrt{x} - \sqrt{x-2})$	
*B.	$2(\sqrt{x} + \sqrt{x-2})$	Correct!
C.	$-2(\sqrt{x} + \sqrt{x-2})$	
D.	$2(\sqrt{x} - \sqrt{x-2})$	

Global Incorrect Feedback

The correct answer is: $2(\sqrt{x} + \sqrt{x-2})$.

Question 8b of 15 (3 Rationalizing Denominators 295573)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the fraction below when $x \geq 3$? *Hint: Rationalize the denominator and simplify.*

$$\frac{9}{\sqrt{x-4} - 3}$$

	Choice	Feedback
*A.	$3(\sqrt{x} + \sqrt{x-3})$	Correct!
B.	$-3(\sqrt{x} - \sqrt{x-3})$	
C.	$3(\sqrt{x} + \sqrt{x-3})$	
D.	$3(\sqrt{x} - \sqrt{x-3})$	

Global Incorrect Feedback

The correct answer is: $3(\sqrt{x} + \sqrt{x-3})$.

Question 8c of 15 (3 Rationalizing Denominators 295574)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question:

Which choice is equivalent to the fraction below when $x \geq 2$? *Hint: Rationalize the denominator and simplify.*

$$\frac{4}{\sqrt{x-2} - \sqrt{x}}$$

	Choice	Feedback
A.	$-2(\sqrt{x} - \sqrt{x-2})$	
B.	$2(\sqrt{x} + \sqrt{x-2})$	
*C.	$-2(\sqrt{x} + \sqrt{x-2})$	Correct!
D.	$2(\sqrt{x} - \sqrt{x-2})$	

Global Incorrect FeedbackThe correct answer is: $-2(\sqrt{x} + \sqrt{x-2})$.**Question 9a of 15** (1 Rationalizing Denominators 117987)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: To get rid of radicals in the denominator of a fraction, you should *rationalize the denominator* by multiplying the fraction by a helpful form of _____.

	Choice	Feedback
A.	the denominator	
*B.	1	Correct!
C.	the numerator	
D.	x	

Global Incorrect Feedback

The correct answer is: 1.

Question 9b of 15 (1 Rationalizing Denominators 295575)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: To get rid of radicals in the denominator of a fraction, you should *rationalize the denominator* by multiplying the fraction by a helpful form of _____.

	Choice	Feedback
A.	the denominator	
B.	x	
C.	the numerator	
*D.	1	Correct!

Global Incorrect Feedback

The correct answer is: 1.

Question 9c of 15 (1 Rationalizing Denominators 295576)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: To get rid of radicals in the denominator of a fraction, you should *rationalize the denominator* by multiplying the fraction by a helpful form of _____.

	Choice	Feedback
*A.	1	Correct!
B.	the denominator	
C.	the numerator	
D.	x	

Global Incorrect Feedback

The correct answer is: 1.

Question 10a of 15 (1 Rationalizing Denominators 117988)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: To rationalize a denominator that has more than one term, you multiply the fraction by $\frac{B}{B}$, where B is the conjugate of the numerator.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 10b of 15 (1 Rationalizing Denominators 295577)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: To rationalize a denominator that has more than one term, you multiply the fraction by $B + B$, where B is the conjugate of the denominator.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 10c of 15 (1 Rationalizing Denominators 295578)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: To rationalize a denominator that has more than one term, you multiply the fraction by $\frac{B}{B}$, where B is the conjugate of the denominator.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 11a of 15 (1 Rationalizing Denominators 117990)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: If a and b are any real numbers, what is the *conjugate* of $a + b$?

	Choice	Feedback
A.	$a + b$	
B.	$a \div b$	
C.	$a \cdot b$	
*D.	$a - b$	Correct!

Global Incorrect Feedback

The correct answer is: $a - b$.

Question 11b of 15 (1 Rationalizing Denominators 295579)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: If a and b are any real numbers, what is the *conjugate* of $a - b$?

	Choice	Feedback
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*A.	$a + b$	Correct!
B.	$a \div b$	
C.	$a \cdot b$	
D.	$a - b$	

Global Incorrect Feedback

The correct answer is: $a + b$.

Question 11c of 15 (1 Rationalizing Denominators 295580)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: If a and b are any real numbers, what is the *conjugate* of $a + b$?

	Choice	Feedback
A.	$a + b$	
B.	$a \div b$	
*C.	$a - b$	Correct!
D.	$a \cdot b$	

Global Incorrect Feedback

The correct answer is: $a - b$.

Question 12a of 15 (2 Rationalizing Denominators 117991)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the conjugate of $5 + \sqrt{3}$?

	Choice	Feedback
A.	$5 + \sqrt{3}$	
*B.	$5 - \sqrt{3}$	Correct!
C.	$5 \cdot \sqrt{3}$	
D.	$5 \div \sqrt{3}$	

Global Incorrect Feedback

The correct answer is: $5 - \sqrt{3}$.

Question 12b of 15 (2 Rationalizing Denominators 295581)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the conjugate of $5 - \sqrt{3}$?

	Choice	Feedback
*A.	$5 + \sqrt{3}$	Correct!
B.	$5 - \sqrt{3}$	
C.	$5 \cdot \sqrt{3}$	
D.	$5 \div \sqrt{3}$	

Global Incorrect Feedback

The correct answer is: $5 + \sqrt{3}$.

Question 12c of 15 (2 Rationalizing Denominators 295582)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: What is the conjugate of $6 + \sqrt{2}$?

	Choice	Feedback
*A.	$6 - \sqrt{2}$	Correct!
B.	$6 + \sqrt{2}$	
C.	$6 \cdot \sqrt{2}$	
D.	$6 \div \sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $6 - \sqrt{2}$.

Question 13a of 15 (2 Rationalizing Denominators 117993)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Multiplying by a conjugate gives a rational number because $(a + b)(a - b) = \underline{\hspace{2cm}}$.

	Choice	Feedback
A.	$a^2 + b^2$	
B.	$a^2 \cdot b^2$	
*C.	$a^2 - b^2$	Correct!
D.	$a^2 \div b^2$	

Global Incorrect Feedback

The correct answer is: $a^2 - b^2$.

Question 13b of 15 (2 Rationalizing Denominators 295583)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Multiplying by a conjugate gives a rational number because $(a + b)(a - b) = \underline{\hspace{2cm}}$.

	Choice	Feedback
*A.	$a^2 - b^2$	Correct!
B.	$a^2 \cdot b^2$	
C.	$a^2 + b^2$	
D.	$a^2 \div b^2$	

Global Incorrect Feedback

The correct answer is: $a^2 - b^2$.

Question 13c of 15 (2 Rationalizing Denominators 295584)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Multiplying by a conjugate gives a rational number because $(a + b)(a - b) = \underline{\hspace{2cm}}$.

	Choice	Feedback
A.	$a^2 + b^2$	
B.	$a^2 \cdot b^2$	
C.	$a^2 \div b^2$	
*D.	$a^2 - b^2$	Correct!

Global Incorrect Feedback

The correct answer is: $a^2 - b^2$.

Question 14a of 15 (1 Rationalizing Denominators 117995)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: You can use conjugates to rationalize the denominator even when the denominator contains two radical terms.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 14b of 15 (1 Rationalizing Denominators 295585)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: You can only use conjugates to rationalize the denominator when the denominator contains one radical term.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 14c of 15 (1 Rationalizing Denominators 295586)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: You can rationalize the denominator using conjugates even when the denominator contains two radical terms

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 15a of 15 (3 Rationalizing Denominators 117996)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the fraction below when x is an appropriate value? *Hint: Rationalize the denominator and simplify.*

$$\frac{\sqrt{12}}{\sqrt{3} - 3}$$

	Choice	Feedback
A.	$-\sqrt{3}$	
B.	$-1 + \sqrt{3}$	
C.	$-1 - \sqrt{2}$	
*D.	$-1 - \sqrt{3}$	Correct!

Global Incorrect Feedback

The correct answer is: $-1 - \sqrt{3}$.

Question 15b of 15 (3 Rationalizing Denominators 295587)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the fraction below when x is an

appropriate value? *Hint: Rationalize the denominator and simplify.*

$$\frac{\sqrt{6}}{\sqrt{2}-2}$$

	Choice	Feedback
A.	$-\sqrt{2}$	
*B.	$-2 - 2\sqrt{2}$	Correct!
C.	$-2 - \sqrt{3}$	
D.	$-2 + \sqrt{2}$	

Global Incorrect Feedback

The correct answer is: $-2 - 2\sqrt{2}$.

Question 15c of 15 (3 Rationalizing Denominators 295588)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the fraction below when x is an appropriate value? *Hint: Rationalize the denominator and simplify.*

$$\frac{\sqrt{12}}{\sqrt{3}+3}$$

	Choice	Feedback
A.	$-\sqrt{3}$	
*B.	$-1 + \sqrt{3}$	Correct!
C.	$-1 - \sqrt{2}$	
D.	$-1 - \sqrt{3}$	

Global Incorrect Feedback

The correct answer is: $-1 + \sqrt{3}$.

PREVIEW

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Quiz: Solving Radical Equations

Question 1a of 15 (3 Solving Radical Equations 92165)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 16

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x} + 8 = 12$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 16.

Question 1b of 15 (3 Solving Radical Equations 295742)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 9

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x+9} = 12$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 9.

Question 1c of 15 (3 Solving Radical Equations 295743)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 4

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x+9}=11$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 4.

Question 2a of 15 (3 Solving Radical Equations 92166)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 4

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x} - 4 = -2$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 4.

Question 2b of 15 (3 Solving Radical Equations 295744)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 9

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x-9} = 6$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 9.

Question 2c of 15 (3 Solving Radical Equations 295745)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 25

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x-10} = 5$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 25.

Question 3a of 15 (3 Solving Radical Equations 92167)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 6

Question: Solve the equation for x. Do not include "x =" in your answer.

$$3 + \sqrt{2x+4} = 7$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 6.

Question 3b of 15 (3 Solving Radical Equations 295746)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 4

Question: Solve the equation for x. Do not include "x =" in your answer.

$$2 + \sqrt{x+4} = 6$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 4.

Question 3c of 15 (3 Solving Radical Equations 295747)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 2

Question: Solve the equation for x. Do not include "x =" in your answer.

$$4 + \sqrt{x+4} = 6$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
--	----------------------------------

	The correct answer is: 2.
--	---------------------------

Question 4a of 15 (3 Solving Radical Equations 92168)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 22

Question: Solve the equation for x. Do not include "x =" in your answer.

$$-2 + \sqrt{3x - 2} = 6$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 22.

Question 4b of 15 (3 Solving Radical Equations 295748)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 24

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{3x - 2} = 7$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 24.

Question 4c of 15 (3 Solving Radical Equations 295749)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 25
Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt[3]{x-11} = 5$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 25.

Question 5a of 15 (3 Solving Radical Equations 92169)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 9
Question: Solve the equation for x. Do not include "x =" in your answer.

$$\frac{\sqrt{2x}}{\sqrt{x-7}} = 3$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 9.

Question 5b of 15 (3 Solving Radical Equations 295750)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 4
Question: Solve the equation for x. Do not include "x =" in your answer.

$$\frac{\sqrt{2x}}{\sqrt{x-2}} = 2$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 4.

Question 5c of 15 (3 Solving Radical Equations 295751)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 9

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\frac{\sqrt{3x}}{\sqrt{x-6}} = 3$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 9.

Question 6a of 15 (3 Solving Radical Equations 92170)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 8

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\frac{\sqrt{3x}}{\sqrt{x-2}} = 2$$

Attempt	Incorrect Feedback

1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 8.

Question 6b of 15 (3 Solving Radical Equations 295752)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 8

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\frac{\sqrt{3x}}{\sqrt{x-2}} = 2$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 8.

Question 6c of 15 (3 Solving Radical Equations 295753)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 8

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\frac{\sqrt{3x}}{\sqrt{x-2}} = 2$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback

	Correct!
	Global Incorrect Feedback
	The correct answer is: 8.

Question 7a of 15 (3 Solving Radical Equations 92171)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 6

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x+3} = x-3$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 6.

Question 7b of 15 (3 Solving Radical Equations 295754)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 10

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x+6} = x-6$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 10.

Question 7c of 15 (3 Solving Radical Equations 295755)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 7

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x+4} = x-4$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 7.

Question 8a of 15 (3 Solving Radical Equations 92172)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 13

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x-4} = x-10$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 13.

Question 8b of 15 (3 Solving Radical Equations 295756)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 14

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x+3} = x-1$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 14.

Question 8c of 15 (3 Solving Radical Equations 295757)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 15

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x+3} = x-1$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 15.

Question 9a of 15 (1 Solving Radical Equations 211105)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: You can use the "isolate the radical, then square both sides" method to simplify the equation below.

$$\frac{\sqrt{x+3}}{\sqrt{x-1}} = 3$$

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 9b of 15 (1 Solving Radical Equations 295758)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The equation below is too complicated to use the "isolate the radical, then square both sides" method to simplify.

$$\frac{\sqrt{x+3}}{\sqrt{x-1}} = 3$$

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 9c of 15 (1 Solving Radical Equations 295759)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: You can use the "square both sides, then isolate the radical" method to simplify the equation below.

$$\frac{\sqrt{x+3}}{\sqrt{x-1}} = 3$$

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 10a of 15 (1 Solving Radical Equations 119396)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: In general, when solving a radical equation, you should first isolate the _____ and then square both sides.

	Choice	Feedback
A.	variable	
B.	coefficient	
*C.	radical	Correct!
D.	operator	

Global Incorrect Feedback

The correct answer is: radical.

Question 10b of 15 (1 Solving Radical Equations 295760)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: In general, when solving a radical equation, you should first _____ the radical and then square both sides.

	Choice	Feedback
*A.	isolate	Correct!
B.	move	
C.	change	
D.	square	

Global Incorrect Feedback

The correct answer is: isolate.

Question 10c of 15 (1 Solving Radical Equations 295761)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: In general, when solving a radical equation, you should first isolate the radical and then _____ both sides.

	Choice	Feedback
--	--------	----------

A.	multiply	
B.	subtract	
C.	add	
*D.	square	Correct!

Global Incorrect Feedback

The correct answer is: square.

Question 11a of 15 (3 Solving Radical Equations 119401)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 36

Question: Solve the equation for x. Do not include "x =" in your answer.

$$3 + \sqrt{x} = 9$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 36.

Question 11b of 15 (3 Solving Radical Equations 295762)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 25

Question: Solve the equation for x. Do not include "x =" in your answer.

$$3 + \sqrt{x} = 8$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 25.

Question 11c of 15 (3 Solving Radical Equations 295763)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 49

Question: Solve the equation for x. Do not include "x =" in your answer.

$$3 + \sqrt{x} = 10$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 49.

Question 12a of 15 (3 Solving Radical Equations 119413)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 32

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{2x} - 17 = -9$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 32.

Question 12b of 15 (3 Solving Radical Equations 295764)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 18

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{2x} - 19 = -13$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 18.

Question 12c of 15 (3 Solving Radical Equations 295765)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 50

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{2x} - 15 = -5$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 50.

Question 13a of 15 (3 Solving Radical Equations 119419)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 11

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x+5} - 1 = 3$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 11.

Question 13b of 15 (3 Solving Radical Equations 295766)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 20

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x+5} - 1 = 4$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 20.

Question 13c of 15 (3 Solving Radical Equations 295767)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 4

Question: Solve the equation for x. Do not include "x =" in your answer.

$$\sqrt{x+5} - 1 = 2$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback

	Correct!
	Global Incorrect Feedback
	The correct answer is: 4.

Question 14a of 15 (3 Solving Radical Equations 119421)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -5

Question: Solve the equation for x. Do not include "x =" in your answer.

$$11 + \sqrt{1-3x} = 15$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: -5.

Question 14b of 15 (3 Solving Radical Equations 295769)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -7

Question: Solve the equation for x. Do not include "x =" in your answer.

$$12 + \sqrt{1-5x} = 18$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: -7.

Question 14c of 15 (3 Solving Radical Equations 295770)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -2

Question: Solve the equation for x. Do not include "x =" in your answer.

$$12 + \sqrt{1-4x} = 15$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: -2.

Question 15a of 15 (1 Solving Radical Equations 119426)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: You should keep in mind that when you square both sides of an equation and get an x^2 -term, you may get extraneous variables.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback
The correct answer is: False.

Question 15b of 15 (1 Solving Radical Equations 295771)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: You should keep in mind that when you square both sides of an equation and get an x^2 -term, you may get extraneous variables.

	Choice	Feedback
A.	True	

*B.	False	Correct!
-----	-------	----------

Global Incorrect Feedback
The correct answer is: False.

Question 15c of 15 (1 Solving Radical Equations 295772)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: You should keep in mind that when you square both sides of an equation and get an x^2 -term, you may get extraneous variables.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback
The correct answer is: False.

PREVIEW

CLOSE

Quiz: Fractional Exponents - Part 1

Question 1a of 15 (2 Rational Exponents 119836)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: 1/2

Question: What rational exponent represents a square root? Enter the fraction below using a slash (/) for the fraction bar.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 1/2.

Question 1b of 15 (2 Rational Exponents 295825)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: 1/3

Question: What rational exponent represents a cube root? Enter the fraction below using a slash (/) for the fraction bar.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 1/3.

Question 1c of 15 (2 Rational Exponents 295827)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: 1/2

Question: What rational exponent represents a square root? Enter the fraction below using a slash (/) for the fraction bar.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 1/2.

Question 2a of 15 (2 Rational Exponents 119837)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: 2/3

Question: What rational exponent represents a cube root squared? Enter the fraction below using a slash (/) for the fraction bar.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 2/3.

Question 2b of 15 (2 Rational Exponents 295828)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: 3/2

Question: What rational exponent represents a square root cubed? Enter the

fraction below using a slash (/) for the fraction bar.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 3/2.

Question 2c of 15 (2 Rational Exponents 295829)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: 4/3

Question: What rational exponent represents a cube root taken to the fourth power? Enter the fraction below using a slash (/) for the fraction bar.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 4/3.

Question 3a of 15 (3 Rational Exponents 119838)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 2

Question: Simplify the expression and enter your answer below.

$$8^{1/3}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 2.

Question 3b of 15 (3 Rational Exponents 295830)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 3

Question: Simplify the expression and enter your answer below.

$$27^{1/3}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 3.

Question 3c of 15 (3 Rational Exponents 295832)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 4

Question: Simplify the expression and enter your answer below.

$$64^{1/3}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 4.

Question 4a of 15 (3 Rational Exponents 119839)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 4
Question: Simplify the expression and enter your answer below.

$$256^{1/4}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 4.

Question 4b of 15 (3 Rational Exponents 295833)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 3
Question: Simplify the expression and enter your answer below.

$$81^{1/4}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 3.

Question 4c of 15 (3 Rational Exponents 295834)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 5
Question: Simplify the expression and enter your answer below.

$$625^{1/4}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 5.

Question 5a of 15 (2 Rational Exponents 119840)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are real numbers? *Check all that apply.*

Correct Answers:

	Choice
*A.	$(-1024)^{1/5}$
B.	$(-531441)^{1/12}$
*C.	$(-131072)^{1/17}$
D.	$(-256)^{1/8}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $(-1024)^{1/5}$ and $(-131072)^{1/17}$.

Question 5b of 15 (2 Rational Exponents 295835)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are real numbers? *Check all that apply.*

Correct Answers:

	Choice
A.	$(-1024)^{1/4}$
*B.	$(-531441)^{1/13}$
C.	$(-131072)^{1/16}$
*D.	$(-256)^{1/9}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $(-531441)^{1/13}$ and $(-256)^{1/9}$.

Question 5c of 15 (2 Rational Exponents 295836)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are real numbers? *Check all that apply.*

Correct Answers:

	Choice
*A.	$(-5776)^{1/7}$
B.	$(-531441)^{1/12}$
C.	$(-131072)^{1/16}$
*D.	$(-256)^{1/11}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $(-5776)^{1/7}$ and $(-256)^{1/11}$.

Question 6a of 15 (2 Rational Exponents 119841)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are real numbers? *Check all that apply.*

Correct Answers:

	Choice
*A.	$(-14348907)^{1/15}$
B.	$(-59049)^{1/10}$
C.	$(-16384)^{1/14}$
*D.	$(-216)^{1/3}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $(-14348907)^{1/15}$ and $(-216)^{1/3}$.

Question 6b of 15 (2 Rational Exponents 295838)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are real numbers? *Check all that apply.*

Correct Answers:

	Choice
A.	$(-17896)^{1/14}$
*B.	$(-68467)^{1/11}$
*C.	$(-76437465)^{1/13}$
D.	$(-523)^{1/4}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Correct!
	Global Incorrect Feedback
	The correct answers are: $(-68467)^{1/11}$ and $(-76437465)^{1/13}$.

Question 6c of 15 (2 Rational Exponents 295839)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are real numbers? *Check all that apply.*

Correct Answers:

	Choice
A.	$(-789856)^{1/12}$
B.	$(-9)^{1/10}$
*C.	$(-46543)^{1/13}$
*D.	$(-23)^{1/3}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $(-46543)^{1/13}$ and $(-23)^{1/3}$.

Question 7a of 15 (3 Rational Exponents 119842)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 5

Question: Simplify the expression and enter your answer below.

$$(5^{1/2})^2$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 5.

Question 7b of 15 (3 Rational Exponents 295841)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 6

Question: Simplify the expression and enter your answer below.

$$(6^{1/2})^2$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 6.

Question 7c of 15 (3 Rational Exponents 295842)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 7

Question: Simplify the expression and enter your answer below.

$$(7^{1/2})^2$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 7.

Question 8a of 15 (3 Rational Exponents 119843)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 6

Question: Simplify the expression and enter your answer below.

$$(6^{1/4}) \cdot (6^{1/4}) \cdot (6^{1/4}) \cdot (6^{1/4})$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 6.

Question 8b of 15 (3 Rational Exponents 295844)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 8

Question: Simplify the expression and enter your answer below.

$$(8^{1/4}) \cdot (8^{1/4}) \cdot (8^{1/4}) \cdot (8^{1/4})$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 8.

Question 8c of 15 (3 Rational Exponents 295845)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 10

Question: Simplify the expression and enter your answer below.

$$(10^{1/4}) \cdot (10^{1/4}) \cdot (10^{1/4}) \cdot (10^{1/4})$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 10.

Question 9a of 15 (2 Rational Exponents 119892)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are real numbers? *Check all that apply.*

Correct Answers:

	Choice
A.	$(-4)^{1/2}$
*B.	$(-8)^{1/3}$
C.	$(-16)^{1/4}$
*D.	$(-32)^{1/5}$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answers are: $(-8)^{1/3}$ and $(-32)^{1/5}$.

Question 9b of 15 (2 Rational Exponents 295846)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are real numbers? *Check all that apply.*

Correct Answers:

	Choice
*A.	$(-4)^{1/3}$
B.	$(-10)^{1/4}$
*C.	$(-16)^{1/5}$
D.	$(-32)^{1/6}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $(-4)^{1/3}$ and $(-16)^{1/5}$.

Question 9c of 15 (2 Rational Exponents 295847)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are real numbers? *Check all that apply.*

Correct Answers:

	Choice
*A.	$(-6)^{1/5}$
B.	$(-10)^{1/4}$
*C.	$(-16)^{1/3}$
D.	$(-22)^{1/2}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $(-6)^{1/5}$ and $(-16)^{1/3}$.

Question 10a of 15 (3 Rational Exponents 119896)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 3

Question: Simplify the expression and enter your answer below.

$$(3^{1/4})^4$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 3.

Question 10b of 15 (3 Rational Exponents 295848)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 8

Question: Simplify the expression and enter your answer below.

$$(8^{1/4})^4$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 8.

Question 10c of 15 (3 Rational Exponents 295849)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 9

Question: Simplify the expression and enter your answer below.

$$(9^{1/4})^4$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 9.

Question 11a of 15 (3 Rational Exponents 119897)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 2

Question: Simplify the expression and enter your answer below.

$$(4^2)^{1/4}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 2.

Question 11b of 15 (3 Rational Exponents 295851)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 3

Question: Simplify the expression and enter your answer below.

$$(9^2)^{1/4}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 3.

Question 11c of 15 (3 Rational Exponents 295852)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 4

Question: Simplify the expression and enter your answer below.

$$(16^2)^{1/4}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 4.

Question 12a of 15 (3 Rational Exponents 119899)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 7

Question: Simplify the expression and enter your answer below.

$$(49^3)^{1/6}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 7.

Question 12b of 15 (3 Rational Exponents 295854)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 8
Question: Simplify the expression and enter your answer below.

$$(64^3)^{1/6}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 8.

Question 12c of 15 (3 Rational Exponents 295855)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 9
Question: Simplify the expression and enter your answer below.

$$(81^3)^{1/6}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 9.

Question 13a of 15 (1 Rational Exponents 119902)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 2
Question: What is the index of a square root?

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 2.

Question 13b of 15 (1 Rational Exponents 295857)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 3

Question: What is the index of a cube root?

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 3.

Question 13c of 15 (1 Rational Exponents 295859)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 2

Question: What is the index of a square root?

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 2.

Question 14a of 15 (1 Rational Exponents 119903)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: negative

Question: Any radical expression with a _____ radicand and an even index is *not* a real number.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: negative.

Question 14b of 15 (1 Rational Exponents 295860)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: odd

Question: Any radical expression with a negative radicand and a(n) _____ index is a real number.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: odd.

Question 14c of 15 (1 Rational Exponents 295862)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: even

Question: Any radical expression with a negative radicand and a(n) _____ index is *not* a real number.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: even.

Question 15a of 15 (1 Rational Exponents 119909)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $1/n$

Question: To convert an n^{th} -root notation to one that uses fractional exponents, you change the index n to the exponent _____. Enter your answer below.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $1/n$.

Question 15b of 15 (1 Rational Exponents 295863)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $1/n$

Question: To convert an n^{th} -root notation to one that uses fractional exponents, you change the index n to the exponent _____. Enter your answer below.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Correct!
	Global Incorrect Feedback
	The correct answer is: $1/n$.

Question 15c of 15 (1 Rational Exponents 295864)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $1/n$

Question: To convert an n^{th} -root notation to one that uses fractional exponents, you change the index n to the exponent _____. Enter your answer below.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $1/n$.

PREVIEW

CLOSE

Quiz: Multiplying and Dividing Complex Numbers

Question 1a of 15 (3 Complex Numbers 92047)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $39 + 78i$, $78i + 39$

Question: Find the product of the complex numbers and enter it below.

$$(9 + 6i)(7 + 4i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $39 + 78i$.

Question 1b of 15 (3 Complex Numbers 294743)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $33 + 54i$, $54i + 33$

Question: Find the product of the complex numbers and enter it below.

$$(8 + 5i)(6 + 3i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $33 + 54i$.

Question 1c of 15 (3 Complex Numbers 294744)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $33 + 69i$, $69i + 33$

Question: Find the product of the complex numbers and enter it below.

$$(9 + 7i)(6 + 3i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $33 + 69i$.

Question 2a of 15 (3 Complex Numbers 92048)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $38 + 16i$, $38 + 16i$, $16i + 38$, $16i + 38$

Question: Find the product of the complex numbers and enter it below.

$$(6 + 7i)(4 - 2i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $38 + 16i$.

Question 2b of 15 (3 Complex Numbers 294745)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $33+3i$, $33 + 3i$, $3i+33$, $3i + 33$

Question: Find the product of the complex numbers and enter it below.

$$(5 + 6i)(3 - 3i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $33 + 3i$.

Question 2c of 15 (3 Complex Numbers 294746)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $34+12i$, $34 + 12i$, $12i + 34$

Question: Find the product of the complex numbers and enter it below.

$$(6 + 8i)(3 - 2i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $34 + 12i$.

Question 3a of 15 (3 Complex Numbers 92049)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $3 + 24i$, $24i + 3$

Question: Find the product of the complex numbers and enter it below.

$$(6 + 3i)(2 + 3i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $3 + 24i$.

Question 3b of 15 (3 Complex Numbers 294747)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $10 + 24i$, $24i + 10$

Question: Find the product of the complex numbers and enter it below.

$$(6 + 4i)(3 + 2i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $10 + 24i$.

Question 3c of 15 (3 Complex Numbers 294748)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $2 + 24i$, $24i + 2$

Question: Find the product of the complex numbers and enter it below.

$$(5 + 2i)(2 + 4i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback

	Correct!
	Global Incorrect Feedback
	The correct answer is: $2 + 24i$.

Question 4a of 15 (3 Complex Numbers 92050)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $-87 + 33i, 33i - 87, 33i + -87$

Question: Find the product of the complex numbers and enter it below.

$$(7 + 5i)(-6 + 9i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $-87 + 33i$.

Question 4b of 15 (3 Complex Numbers 294749)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $-82 + 26i, 26i - 82, 26i + -82$

Question: Find the product of the complex numbers and enter it below.

$$(8 + 6i)(-5 + 7i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $-82 + 26i$.

Question 4c of 15 (3 Complex Numbers 294750)**Maximum Attempts:** 1**Question Type:** Text Fill In Blank**Maximum Score:** 2**Is Case Sensitive:** false**Correct Answer:** $-101 + 37i$, $37i - 101$, $37i + -101$ **Question:** Find the product of the complex numbers and enter it below.

$$(8 + 5i)(-7 + 9i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $-101 + 37i$.

Question 5a of 15 (3 Complex Numbers 92051)**Maximum Attempts:** 1**Question Type:** Text Fill In Blank**Maximum Score:** 2**Is Case Sensitive:** false**Correct Answer:** $(18 + 2i)/41$, $18/41 + 2i/41$, $(2i + 18)/41$, $2i/41 + 18/41$, $(18/41) + (2/41)i$, $(2/41)i + (18/41)$ **Question:** Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(2 + 2i) \div (5 + 4i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $(18 + 2i)/41$.

Question 5b of 15 (3 Complex Numbers 294751)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $(27 + 3i)/41$, $27/41 + 3i/41$, $(3i + 27)/41$, $3i/41 + 37/41$, $(27/41) + (3/41)i$, $(3/41)i + (27/41)$
Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(3 + 3i) \div (5 + 4i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $(27 + 3i)/41$.

Question 5c of 15 (3 Complex Numbers 294752)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $(36 + 4i)/41$, $36/41 + 4i/41$, $(4i + 36)/41$, $4i/41 + 36/41$, $(36/41) + (4/41)i$, $(4/41)i + (36/41)$
Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(4 + 4i) \div (5 + 4i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $(36 + 4i)/41$.

Question 6a of 15 (3 Complex Numbers 92052)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(52 + 4i)/85$, $52/85 + 4i/85$, $(4i+52)/85$, $4i/85+52/85$, $(52/85) + (4/85)i$, $(4/85)i+(52/85)$

Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(4 + 4i) \div (7 + 6i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $(52 + 4i)/85$.

Question 6b of 15 (3 Complex Numbers 294753)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(65 + 5i)/85$, $(13+i)/17$, $65/85 + 5i/85$, $13/17+i/17$, $(5i+65)/85$, $(i+13)/17$, $5i/85+65/85$, $i/17+13/17$, $(65/85) + (5/85)i$, $(13/17)+(1/17)i$, $(5/85)i+(65/85)$, $(1/17)i+(13/17)$

Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(5 + 5i) \div (7 + 6i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $(65 + 5i)/85$, or $(13 + i)/17$.

Question 6c of 15 (3 Complex Numbers 294754)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(78 + 6i)/85$, $78/85 + 6i/85$, $(6i+78)/85$, $6i/85+78/85$, $(78/85) + (6/85)i$, $(6/85)i+(78/85)$

Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(6 + 6i) \div (7 + 6i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $(78 + 6i)/85$.

Question 7a of 15 (3 Complex Numbers 92053)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(38+8i)/29$, $38/29+8i/29$, $(8i+38)/29$, $8i/29+38/29$, $(38/29)+(8/29)i$, $(8/29)i+(38/29)$

Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(4 - 6i) \div (2 - 5i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $(38 + 8i)/29$.

Question 7b of 15 (3 Complex Numbers 294755)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $(45+11i)/29$, $45/29+11i/29$, $(11i+45)/29$, $11i/39+45/29$, $(45/29)+(11/29)i$, $(11/39)i+(45/29)$
Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(5 - 7i) \div (2 - 5i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $(45 + 11i)/29$.

Question 7c of 15 (3 Complex Numbers 294756)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $(31+5i)/29$, $31/29+5i/29$, $(5i+31)/29$, $5i/39+31/29$, $(31/29)+(5/29)i$, $(5/39)i+(31/29)$
Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(3 - 5i) \div (2 - 5i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $(31 + 5i)/29$.

Question 8a of 15 (3 Complex Numbers 92054)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(59+2i)/41$, $59/41+2i/41$, $(2i+59)/41$, $2i/41+59/41$

Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(6 - 7i) \div (4 - 5i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $(59 + 2i)/41$.

Question 8b of 15 (3 Complex Numbers 294757)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(68+3i)/41$, $68/41+3i/41$, $(3i+68)/41$, $3i/41+68/41$

Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(7 - 8i) \div (4 - 5i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $(68 + 3i)/41$.

Question 8c of 15 (3 Complex Numbers 294758)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(67+12i)/41$, $67/41+12i/41$, $(12i+67)/41$, $12i/41+67/41$

Question: Find the quotient of the complex numbers. If necessary, use the slash

bar (/) to enter a fraction.

$$(8 - 7i) \div (4 - 5i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $(67 + 12i)/41$.

Question 9a of 15 (3 Complex Numbers 119490)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $12-5i, -5i+12$

Question: Find the product of the complex numbers and enter it below.

$$(3 + 2i)(2 - 3i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $12 - 5i$.

Question 9b of 15 (3 Complex Numbers 294759)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $24-7i, -7i+24$

Question: Find the product of the complex numbers and enter it below.

$$(4 + 3i)(3 - 4i)$$

Attempt	Incorrect Feedback
---------	--------------------

1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $24 - 7i$.

Question 9c of 15 (3 Complex Numbers 294760)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $12 + 5i, 5i + 12$

Question: Find the product of the complex numbers and enter it below.

$$(2 + 3i)(3 - 2i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $12 + 5i$.

Question 10a of 15 (3 Complex Numbers 119497)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(20-40i)/40, 20/40-40i/40, (-40i+20)/40, -40i/40+20/40, 1/2-i, -i+1/2, .5-i, -i+.5, 1/2-1i, -1i+1/2, .5-1i, -1i+.5, (20/40)-(40/40)i, -(40/40)i+(20/40), (-40/40)i+(20/40)$

Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(1 - 7i) \div (6 - 2i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $(20 - 40i)/40$, or $1/2 - i$.

Question 10b of 15 (3 Complex Numbers 294761)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(20+40i)/40$, $20/40+40i/40$, $(40i+20)/40$, $40i/40+20/40$, $1/2+i$, $i+1/2$, $.5+i$, $i+.5$, $1/2+1i$, $1i+1/2$, $.5+1i$, $1i+.5$, $(20/40)+(40/40)i$, $(40/40)i+(20/40)$, $(40/40)i+(20/40)$

Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(1 + 7i) \div (6 + 2i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $(20 + 40i)/40$, or $1/2 + i$.

Question 10c of 15 (3 Complex Numbers 294762)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(-8-44i)/40$, $(-2-11i)/10$, $-8/40-44i/40$, $-1/5-11i/10$, $(-44i-8)/40$, $(-11i-2)/10$, $-44i/40-8/40$, $-11i/10-1/5$, $-(8/40)-(44/40)i$, $-(1/5)-(11/10)i$, $(-8/40)-(44/40)i$, $(-1/5)-(11/10)i$, $(-44/40)i-(8/40)$, $(-11/10)i-(1/5)$, $-(44/40)i-(8/40)$, $-(11/10)i-(1/5)$

Question: Find the quotient of the complex numbers. If necessary, use the slash bar (/) to enter a fraction.

$$(1 - 7i) \div (6 + 2i)$$

Attempt	Incorrect Feedback

1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $(-8 - 44i)/40$, or $(-2 - 11i)/10$.

Question 11a of 15 (3 Complex Numbers 119499)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $-1-9i, -9i-1$

Question: Find the product of the complex numbers and enter it below.

$$(4 - 5i)(1 - i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $-1 - 9i$.

Question 11b of 15 (3 Complex Numbers 294763)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $-1-7i, -7i-1$

Question: Find the product of the complex numbers and enter it below.

$$(3 - 4i)(1 - i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback

	Correct!
	Global Incorrect Feedback
	The correct answer is: $-1 - 7i$.

Question 11c of 15 (3 Complex Numbers 294764)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $-1-5i, -5i-1$

Question: Find the product of the complex numbers and enter it below.

$$(2 - 3i)(1 - i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $-1 - 5i$.

Question 12a of 15 (3 Complex Numbers 119500)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(24-7i)/25, 24/25-7i/25, (-7i+24)/25, -7i/25+24/25, (24/25)-(7/25)i, -(7/25)i+(24/25), (-7/25)i+(24/25)$

Question: Find the quotient of the complex numbers and enter it below. If necessary, use the slash bar (/) to enter a fraction.

$$(3 - 4i) \div (4 - 3i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
--	----------------------------------

	The correct answer is: $(24 - 7i)/25$.
--	---

Question 12b of 15 (3 Complex Numbers 294765)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $(24+7i)/25$, $24/25+7i/25$, $(7i+24)/25$, $7i/25+24/25$, $(24/25)+(7/25)i$, $(7/25)i+(24/25)$

Question: Find the quotient of the complex numbers and enter it below. If necessary, use the slash bar (/) to enter a fraction.

$$(3 + 4i) \div (4 + 3i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $(24 + 7i)/25$.

Question 12c of 15 (3 Complex Numbers 294766)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: -i

Question: Find the quotient of the complex numbers and enter it below. If necessary, use the slash bar (/) to enter a fraction.

$$(3 - 4i) \div (4 + 3i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $-i$.

Question 13a of 15 (3 Complex Numbers 119503)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $-4-29i, -29i-4$

Question: Simplify the following expression as much as possible.

$$(2 + i) - (4 - 6i)(-3 + 3i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $-4 - 29i$.

Question 13b of 15 (3 Complex Numbers 294767)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $-1-23i, -23i-1$

Question: Simplify the following expression as much as possible.

$$(3 + i) - (5 - 7i)(-2 + 2i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $-1 - 23i$.

Question 13c of 15 (3 Complex Numbers 294768)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2
Is Case Sensitive: false
Correct Answer: -15-24i, -24i-25
Question: Simplify the following expression as much as possible.

$$(4 + i) - (3 - 5i)(-2 + 5i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: -15 - 24i.

Question 14a of 15 (1 Complex Numbers 119505)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: a-bi
Question: The complex conjugate of $a + bi$ is _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $a - bi$.

Question 14b of 15 (1 Complex Numbers 294769)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: a+bi
Question: The complex conjugate of $a - bi$ is _____.

Attempt	Incorrect Feedback
---------	--------------------

1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $a + bi$.

Question 14c of 15 (1 Complex Numbers 294770)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $a - bi$

Question: The complex conjugate of $a + bi$ is _____.

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $a - bi$.

Question 15a of 15 (1 Complex Numbers 119507)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -1

Question: To what does the term i^2 simplify?

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: -1.

Question 15b of 15 (1 Complex Numbers 294771)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -1

Question: To what does the term i^2 simplify?

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: -1.

Question 15c of 15 (1 Complex Numbers 294772)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -1

Question: To what does the term i^2 simplify?

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: -1.

PREVIEW

CLOSE

Quiz: Adding and Subtracting Complex Numbers

Question 1a of 15 (2 Complex Numbers 92195)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{-16}$$

Correct Answers:

	Choice
A.	-4
*B.	$i\sqrt{16}$
*C.	$4i$
D.	$-\sqrt{16}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $i\sqrt{16}$ and $4i$.

Question 1b of 15 (2 Complex Numbers 294323)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{-9}$$

Correct Answers:

	Choice
*A.	$i\sqrt{9}$
B.	$-\sqrt{9}$
*C.	$3i$
D.	-3

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $i\sqrt{9}$ and $3i$.

Question 1c of 15 (2 Complex Numbers 294324)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{-4}$$

Correct Answers:

	Choice
*A.	$i\sqrt{4}$
B.	$\sqrt{4}$
C.	-2
*D.	$2i$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Correct!
--	----------

	Global Incorrect Feedback
--	----------------------------------

	The correct answers are: $i\sqrt{4}$ and $2i$.
--	---

Question 2a of 15 (2 Complex Numbers 92196)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{-36}$$

Correct Answers:

	Choice
*A.	$6i$
B.	$-\sqrt{36}$
*C.	$i\sqrt{36}$
D.	-6

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $6i$ and $i\sqrt{36}$.

Question 2b of 15 (2 Complex Numbers 294325)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{-25}$$

Correct Answers:

	Choice
*A.	$i\sqrt{25}$
B.	$-\sqrt{25}$
*C.	$5i$
D.	-5

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $i\sqrt{25}$ and $5i$.

Question 2c of 15 (2 Complex Numbers 294326)

Maximum Attempts: 1

Question Type: Multiple Response

Maximum Score: 2

Question: Which choices are equivalent to the expression below? *Check all that apply.*

$$\sqrt{-49}$$

Correct Answers:

	Choice
A.	-7
*B.	$i\sqrt{49}$
C.	$-\sqrt{49}$
*D.	$7i$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answers are: $i\sqrt{49}$ and $7i$.

Question 3a of 15 (3 Complex Numbers 92197)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $11 + 10i$, $10i + 11$

Question: Find the sum of the complex numbers.

$$(2 + 4i) + (9 + 6i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $11 + 10i$.

Question 3b of 15 (3 Complex Numbers 294327)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $13 + 12i$, $12i + 13$

Question: Find the sum of the complex numbers.

$$(3 + 5i) + (10 + 7i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $13 + 12i$.

Question 3c of 15 (3 Complex Numbers 294328)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $11 + 10i$, $10i + 11$

Question: Find the sum of the complex numbers.

$$(3 + 3i) + (8 + 7i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $11 + 10i$.

Question 4a of 15 (3 Complex Numbers 92198)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $7 + 14i$, $14i + 7$

Question: Find the sum of the complex numbers.

$$(2 + 8i) + (5 + 6i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $7 + 14i$.

Question 4b of 15 (3 Complex Numbers 294329)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $9 + 16i$, $16i + 9$

Question: Find the sum of the complex numbers.

$$(3 + 9i) + (6 + 7i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $9 + 16i$.

Question 4c of 15 (3 Complex Numbers 294330)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $5 + 12i$, $12i + 5$

Question: Find the sum of the complex numbers.

$$(1 + 7i) + (4 + 5i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $5 + 12i$.

Question 5a of 15 (3 Complex Numbers 92199)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false
Correct Answer: $7 + 9i$, $9i + 7$
Question: Find the difference of the complex numbers.

$$(3 + 7i) - (-4 - 2i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $7 + 9i$.

Question 5b of 15 (3 Complex Numbers 294331)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $7 + 11i$, $11i + 7$
Question: Find the difference of the complex numbers.

$$(2 + 8i) - (-5 - 3i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $7 + 11i$.

Question 5c of 15 (3 Complex Numbers 294332)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $9 + 11i$, $11i + 9$
Question: Find the difference of the complex numbers.

$$(5 + 9i) - (-4 - 2i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $9 + 11i$.

Question 6a of 15 (3 Complex Numbers 92200)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $2 + 10i$, $10i + 2$

Question: Find the difference of the complex numbers.

$$(6 + 2i) - (4 - 8i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $2 + 10i$.

Question 6b of 15 (3 Complex Numbers 294333)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $4 + 12i$, $12i + 4$

Question: Find the difference of the complex numbers.

$$(7 + 3i) - (3 - 9i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback

	Correct!
	Global Incorrect Feedback
	The correct answer is: $4 + 12i$.

Question 6c of 15 (3 Complex Numbers 294334)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $4 + 10i$, $10i + 4$
Question: Find the difference of the complex numbers.

$$(7 + 3i) - (3 - 7i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $4 + 10i$.

Question 7a of 15 (3 Complex Numbers 92201)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $14 + 4i$, $4i + 14$
Question: Simplify the expression below as much as possible.

$$(7 + 4i) + (9 + 5i) - (2 + 5i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $14 + 4i$.

Question 7b of 15 (3 Complex Numbers 294335)**Maximum Attempts:** 1**Question Type:** Text Fill In Blank**Maximum Score:** 2**Is Case Sensitive:** false**Correct Answer:** $13 + 3i$, $3i + 13$ **Question:** Simplify the expression below as much as possible.

$$(6 + 3i) + (8 + 4i) - (1 + 4i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $13 + 3i$.

Question 7c of 15 (3 Complex Numbers 294336)**Maximum Attempts:** 1**Question Type:** Text Fill In Blank**Maximum Score:** 2**Is Case Sensitive:** false**Correct Answer:** $15 + 5i$, $5i + 15$ **Question:** Simplify the expression below as much as possible.

$$(8 + 5i) + (10 + 6i) - (3 + 6i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $15 + 5i$.

Question 8a of 15 (3 Complex Numbers 92202)**Maximum Attempts:** 1**Question Type:** Text Fill In Blank

Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $5 + 7i$, $7i + 5$
Question: Simplify the expression below as much as possible.

$$(8 + 9i) + (5 - 9i) - (8 - 7i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $5 + 7i$.

Question 8b of 15 (3 Complex Numbers 294337)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $4 + 7i$, $7i + 4$
Question: Simplify the expression below as much as possible.

$$(9 + 8i) + (4 - 7i) - (9 - 6i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $4 + 7i$.

Question 8c of 15 (3 Complex Numbers 294338)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $4 + 5i$, $5i + 4$
Question: Simplify the expression below as much as possible.

$$(7 + 10i) + (4 - 10i) - (7 - 5i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $4 + 5i$.

Question 9a of 15 (3 Complex Numbers 119452)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $7+i$, $i+7$, $7+1i$, $1i+7$

Question: Simplify the expression below as much as possible.

$$(5 + 3i) + (2 - 2i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $7 + i$.

Question 9b of 15 (3 Complex Numbers 294339)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $9+i$, $i+9$, $9+1i$, $1i+9$

Question: Simplify the expression below as much as possible.

$$(6 + 4i) + (3 - 3i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: $9 + i$.

Question 9c of 15 (3 Complex Numbers 294340)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $8+i$, $i+8$, $8+1i$, $1i+8$

Question: Simplify the expression below as much as possible.

$$(7 + 4i) + (1 - 3i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $8 + i$.

Question 10a of 15 (3 Complex Numbers 119456)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $11i$, $0+11i$, $11i+0$

Question: Simplify the expression below as much as possible.

$$(5 + 2i) - (3 - 5i) + (-2 + 4i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
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	The correct answer is: $11i$.
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Question 10b of 15 (3 Complex Numbers 294341)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $14i$, $0+14i$, $14i+0$

Question: Simplify the expression below as much as possible.

$$(6 + 3i) - (4 - 6i) + (-2 + 5i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $14i$.

Question 10c of 15 (3 Complex Numbers 294342)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $15i$, $0+15i$, $15i+0$

Question: Simplify the expression below as much as possible.

$$(7 + 4i) - (3 - 6i) + (-4 + 5i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $15i$.

Question 11a of 15 (3 Complex Numbers 119459)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $-11 + 7i$, $7i - 11$
Question: Simplify the expression below as much as possible.

$$(-7 + 2i) - (4 - 4i) + i.$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $-11 + 7i$.

Question 11b of 15 (3 Complex Numbers 294343)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: $-13 + 9i$, $9i - 13$
Question: Simplify the expression below as much as possible.

$$(-8 + 3i) - (5 - 5i) + i.$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $-13 + 9i$.

Question 11c of 15 (3 Complex Numbers 294344)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false

Correct Answer: $-14 + 10i, 10i - 14$

Question: Simplify the expression below as much as possible.

$$(-9 + 3i) - (5 - 6i) + i.$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: $-14 + 10i$.

Question 12a of 15 (2 Complex Numbers 119464)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $12, 12 + 0i, 0i + 12$

Question: Simplify the expression below as much as possible.

$$(6 - i) + (4 + 2i) - (-2 + i)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 12.

Question 12b of 15 (2 Complex Numbers 294345)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: $15, 15 + 0i, 0i + 15$

Question: Simplify the expression below as much as possible.

$$(7 - i) + (5 + 3i) - (-3 + 2i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 15.

Question 12c of 15 (2 Complex Numbers 294346)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: 14, 14 + 0i, 0i + 14

Question: Simplify the expression below as much as possible.

$$(5 - 2i) + (3 + 4i) - (-6 + 2i)$$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: 14.

Question 13a of 15 (1 Complex Numbers 119483)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The set of complex numbers contains only numbers of the form $a + bi$, where a and b are positive numbers and i is the imaginary unit.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback
The correct answer is: False.

Question 13b of 15 (1 Complex Numbers 294347)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The set of complex numbers contains only numbers of the form $a + bi$, where a and b are positive numbers and i is the imaginary unit.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 13c of 15 (1 Complex Numbers 294348)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: The set of complex numbers contains only numbers of the form $a + bi$, where a and b are positive numbers and i is the imaginary unit.

	Choice	Feedback
A.	True	
*B.	False	Correct!

Global Incorrect Feedback

The correct answer is: False.

Question 14a of 15 (2 Complex Numbers 119486)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: As when adding complex numbers, when subtracting complex numbers, you also combine like terms, but you should make sure the minus sign is distributed over each term.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 14b of 15 (2 Complex Numbers 294349)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: As when adding complex numbers, when subtracting complex numbers, you also combine like terms, but you should make sure the minus sign is distributed over each term.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 14c of 15 (2 Complex Numbers 294350)

Maximum Attempts: 1

Question Type: True-False

Maximum Score: 2

Question: As when adding complex numbers, when subtracting complex numbers, you also combine like terms, but you should make sure the minus sign is distributed over each term.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback

The correct answer is: True.

Question 15a of 15 (1 Complex Numbers 119487)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: like

Question: To add complex numbers, you first collect _____ terms.

Attempt	Incorrect Feedback
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1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: like.

Question 15b of 15 (1 Complex Numbers 294351)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: terms

Question: To add complex numbers, you first collect like _____.

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: terms.

Question 15c of 15 (1 Complex Numbers 294352)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: like

Question: To add complex numbers, you first collect _____ terms.

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answer is: like.
