

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 FeedbackThe 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?

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

	Choice	Feedback
A.	$3\sqrt{5}$	
*B.	$4\sqrt{7}$	Correct!
C.	$3\sqrt{2}$	
D.		

Global Incorrect Feedback

The correct answer is: .

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?

Alg

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

Global Incorrect Feedback

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

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?

	Choice	Feedback
A.		
B.		
*C.		Correct!
D.	28	

Global Incorrect Feedback

The correct answer is: .

Alg

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?

$$\sqrt{14} \cdot \sqrt{15}$$

	Choice	Feedback
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?

	Choice	Feedback
A.		
B.		
C.		
*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?

$$\sqrt{2} \cdot \sqrt{8} \cdot \sqrt{4}$$

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

$$\sqrt{2} \cdot \sqrt{5} \cdot \sqrt{8}$$

	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: .

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?

	Choice	Feedback
A.		
B.		
*C.		Correct!
D.		

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

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?

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

	Choice	Feedback
*A.	$4\sqrt{5}$	Correct!
B.	$3\sqrt{12}$	
C.	$12\sqrt{3}$	
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.	
C.	
*D.	
E.	75
*F.	

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: <input type="checkbox"/> , <input type="checkbox"/> , and <input type="checkbox"/> .

Alg

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.*

$$8\sqrt{3}$$

Correct Answers:

	Choice
A.	$\sqrt{154}$
*B.	$\sqrt{108}$
*C.	$\sqrt{12} + \sqrt{6}$
D.	$\sqrt{3} + \sqrt{6}$
*E.	$\sqrt{3} + \sqrt{56}$
F.	108

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answers are: $\sqrt{108}$, $\sqrt{12} + \sqrt{6}$, and $\sqrt{3} + \sqrt{56}$.

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.*

Correct Answers:

	Choice
*A.	
*B.	
C.	
D.	
*E.	
F.	48

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

Alg

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.*

Correct Answers:

Alg

	Choice
*A.	-154
*B.	$-\sqrt{27} \cdot \sqrt{2}$
C.	$\sqrt{13}$
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: $\sqrt{54}$, $\sqrt{27} \cdot \sqrt{4}$, 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.*

$$2\sqrt{6}$$

Correct Answers:

	Choice
*A.	$\sqrt{6} \cdot \sqrt{5}$
B.	$\sqrt{6} \cdot \sqrt{24}$
*C.	$\sqrt{6} \cdot \sqrt{2}$
D.	
E.	72
*F.	

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

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

Alg

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.*

Correct Answers:

	Choice
A.	60
*B.	
*C.	
*D.	
E.	20
F.	

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

Alg

Global Incorrect Feedback	
	The correct answers are: $-\sqrt{30}$, $2\sqrt{15}$, and $-\sqrt{4} + \sqrt{15}$.

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.*

$$\sqrt{30} + \sqrt{15}$$

Correct Answers:

	Choice
A.	$\sqrt{15}$
*B.	$\sqrt{30}$
C.	12
*D.	$\sqrt{2} + \sqrt{15}$
*E.	$4\sqrt{2}$
F.	16

Attempt	Incorrect Feedback
1st	

Correct Feedback	
	Correct!

Global Incorrect Feedback	
	The correct answers are: $\sqrt{30}$, $\sqrt{2}$, $\sqrt{15}$, 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.*

Correct Answers:

	Choice
A.	
*B.	
*C.	
D.	150
E.	
*F.	

Alg

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
<input checked="" type="checkbox"/>	A. $5\sqrt{20}$
<input type="checkbox"/>	B. $5\sqrt{3}$
<input checked="" type="checkbox"/>	C. $\sqrt{130}$
<input type="checkbox"/>	D. 180
<input checked="" type="checkbox"/>	E. $\sqrt{15} \cdot \sqrt{12}$
<input type="checkbox"/>	F. $3\sqrt{20}$

Attempt	Incorrect Feedback
1st	
	Correct Feedback
	Correct!
	Global Incorrect Feedback
	The correct answers are: , , and .

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.*

Correct Answers:

Alg

	Choice
*A.	$\sqrt{10}$
*B.	$2\sqrt{25}$
C.	100
*D.	10
E.	$10\sqrt{10}$
F.	$\sqrt{5}$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

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

Alg

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!

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.

Alg

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 FeedbackThe 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.		Correct!

Global Incorrect Feedback

The correct answer is: .

Alg

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.		Correct!
B.	b^2	
C.		
D.	1	

Global Incorrect Feedback

The correct answer is: .

Alg

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 ?

	Choice	Feedback
*A.	0	Correct!
B.	- 1	
C.	undefined	
D.	1	

Global Incorrect Feedback
The correct answer is: 0.

Alg

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 $\sqrt{\sqrt{0}}$?

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

Global Incorrect Feedback

The correct answer is: 0.
