Alg

Quiz: Dividing Radicals

Question 1a of 14 (2 Dividing Radicals 92157)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	2
Question:	Which inequality represents all values of x for which the quotient below is defined?

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

	Choice	Feedback
A.	$x > 1$	
B.	$x \geq 0$	
***C.**	$x > 0$	Correct!
D.	$x > -1$	

Global Incorrect Feedback
The correct answer is: $x > 0$.

Question 1b of 14 (2 Dividing Radicals 295308)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	2
Question:	Which inequality represents all values of x for which the quotient below is defined?

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

	Choice	Feedback
A.	$x > -1$	
***B.**	$x > 0$	Correct!
C.	$x \geq 0$	
D.	$x > 1$	

Global Incorrect Feedback
The correct answer is: $x > 0$.

Question 1c of 14 (2 Dividing Radicals 295309)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	2
Question:	Which inequality represents all values of x for which the quotient below is defined?

	Choice	Feedback
***A.**	$x > 0$	Correct!
B.	$x \quad 0$	
C.	$x > 1$	
D.	$x > -1$	

Global Incorrect Feedback
The correct answer is: $x > 0$.

Alg

Question 2a of 14 (2 Dividing Radicals 92158)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

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

	Choice	Feedback
A.	$x > 1$	
B.	$x < -1$	
C.	$x \leq -1$	
*D.	$x \geq 1$	Correct!

Global Incorrect Feedback
The correct answer is: $x \geq 1$.

Question 2b of 14 (2 Dividing Radicals 295310)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

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

	Choice	Feedback
*A.	$x \geq 1$	Correct!
B.	$x < -1$	
C.	$x \leq -1$	
D.	$x > 1$	

Global Incorrect Feedback
The correct answer is: $x \geq 1$.

Question 2c of 14 (2 Dividing Radicals 295311)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

	Choice	Feedback
A.	$x > 1$	
B.	$x < -1$	
*C.	$x \geq 1$	Correct!
D.	$x \leq -1$	

Global Incorrect Feedback
The correct answer is: $x \geq 1$.

Alg

Question 3a of 14 (3 Dividing Radicals 92159)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

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

	Choice	Feedback
*A.	$\sqrt{\dfrac{7x}{3}}$	Correct!
B.	$x\sqrt{\dfrac{7x}{3}}$	
C.	$\sqrt{\dfrac{7x^3}{3}}$	
D.	$\sqrt{21x^3}$	

Global Incorrect Feedback
The correct answer is: $\sqrt{\dfrac{7x}{3}}$.

Question 3b of 14 (3 Dividing Radicals 295312)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

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

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

Global Incorrect Feedback
The correct answer is: .

Alg

Question 3c of 14 (3 Dividing Radicals 295313)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	2
Question:	Which choice is equivalent to the quotient shown here for acceptable values of *x*?

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

	Choice	Feedback
A.	$\sqrt{45x^3}$	
***B.**	$\sqrt{\dfrac{5x}{5}}$	Correct!
C.	$\sqrt{\dfrac{5x^3}{5}}$	
D.	$x\sqrt{\dfrac{9x}{5}}$	

Global Incorrect Feedback
The correct answer is: $\sqrt{\dfrac{5x}{5}}$.

Question 4a of 14 (3 Dividing Radicals 92160)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	2
Question:	Which choice is equivalent to the quotient shown here for acceptable values of *x*?

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

	Choice	Feedback
A.	$\sqrt{6(x-1)}$	
B.	$\sqrt{30(x-1) - 5(x-1)^2}$	
C.		
***D.**		Correct!

Global Incorrect Feedback
The correct answer is: .

Question 4b of 14 (3 Dividing Radicals 295314)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	2
Question:	Which choice is equivalent to the quotient shown here for acceptable values of *x*?

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

Alg

	Choice	Feedback
*A.	$\sqrt{\dfrac{6}{(x-1)}}$	Correct!
B.	$\sqrt{1.5(x-1)^2}$	
C.	$\sqrt{25(x-1)-5(x-1)^2}$	
D.	$\sqrt{5(x-1)}$	

Global Incorrect Feedback
The correct answer is: $\sqrt{\dfrac{6}{(x-1)}}$.

Question 4c of 14 (3 Dividing Radicals 295315)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Which choice is equivalent to the quotient shown here for acceptable values of x?

$$\sqrt{6(x-1)} \div \sqrt{2(x-1)^2}$$

	Choice	Feedback
A.	$\sqrt{6(x-1)}$	
B.	$\sqrt{12(x-1)^2 - 2(x-1)}$	
*C.	$\sqrt{\dfrac{6}{(x-1)}}$	Correct!
D.	$\sqrt{24(x-1)^3}$	

Global Incorrect Feedback
The correct answer is: $\sqrt{\dfrac{6}{(x-1)}}$.

Question 5a of 14 (3 Dividing Radicals 92161)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Which choice is equivalent to the quotient shown here when $x > 0$?

	Choice	Feedback
A.		
B.	$2x$	
C.		
*D.		Correct!

Global Incorrect Feedback
The correct answer is: .

Alg

Question 5b of 14 (3 Dividing Radicals 295316)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Which choice is equivalent to the quotient shown here when $x > 0$?

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

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

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

Question 5c of 14 (3 Dividing Radicals 295318)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Which choice is equivalent to the quotient shown here when $x > 0$?

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

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

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

Question 6a of 14 (3 Dividing Radicals 92162)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Which choice is equivalent to the quotient shown here when $x > 0$?

	Choice	Feedback
*A.		Correct!
B.	$5x$	
C.		
D.	$5x^2$	

Global Incorrect Feedback
The correct answer is: .

Alg

Question 6b of 14 (3 Dividing Radicals 295320)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

$$\sqrt{42x^5} \div \sqrt{6x^3}$$

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

Global Incorrect Feedback
The correct answer is: $x\sqrt{7}$.

Question 6c of 14 (3 Dividing Radicals 295321)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

$$\sqrt{22x^3} \div \sqrt{11x}$$

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

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

Question 7a of 14 (3 Dividing Radicals 92163)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which choice is equivalent to the quotient shown here when x 0?

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

Alg

Question 7b of 14 (3 Dividing Radicals 295323)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

$$\sqrt{18x} \div \sqrt{50}$$

	Choice	Feedback
*A.	$\dfrac{3\sqrt{x}}{5}$	Correct!
B.	$\dfrac{\sqrt{x}}{10}$	
C.	$\sqrt{\dfrac{x}{20}}$	
D.	$\sqrt{10}, \ 50$	

Global Incorrect Feedback
The correct answer is: $\dfrac{3\sqrt{x}}{5}$.

Question 7c of 14 (3 Dividing Radicals 295325)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

$$\sqrt{27x} \div \sqrt{48}$$

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

Global Incorrect Feedback
The correct answer is: .

Alg

Question 8a of 14 (3 Dividing Radicals 92164)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

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

	Choice	Feedback
*A.	$\dfrac{6\sqrt{x}}{5}$	Correct!
B.	$\sqrt{22x}$	
C.	$\dfrac{6x}{5}$	
D.	$\sqrt{72x^3 - 50x^2}$	

Global Incorrect Feedback
The correct answer is: $\dfrac{6\sqrt{x}}{5}$.

Question 8b of 14 (3 Dividing Radicals 295327)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

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

	Choice	Feedback
A.	$\sqrt{48x^3 - 72x^2}$	
B.	$\sqrt{25x}$	
*C.	$\dfrac{7\sqrt{x}}{5}$	Correct!
D.		

Global Incorrect Feedback
The correct answer is: .

Question 8c of 14 (3 Dividing Radicals 295328)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

Alg

	Choice	Feedback
A.	$\sqrt{8x}$	
B.	$\sqrt{50x^2} \quad 32\sqrt{7}$	
C.	$\dfrac{5x}{4}$	
*D.	$\dfrac{5\sqrt{x}}{4}$	Correct!

Global Incorrect Feedback
The correct answer is: $\dfrac{5\sqrt{x}}{4}$.

Question 9a of 14 (1 Dividing Radicals 117792)

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

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 9b of 14 (1 Dividing Radicals 295329)

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

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 9c of 14 (1 Dividing Radicals 295330)

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

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Alg

Question 10a of 14 (2 Dividing Radicals 117793)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: For what values of x is the expression below defined?

$$\sqrt{x + 3}$$

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

Global Incorrect Feedback
The correct answer is: $x \geq -3$.

Question 10b of 14 (2 Dividing Radicals 295334)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: For what values of x is the expression below defined?

$$\sqrt{x + 4}$$

	Choice	Feedback
A.	$x > 4$	
B.	$x \geq 4$	
*C.	$x \geq -4$	Correct!
D.	$x \leq -4$	

Global Incorrect Feedback
The correct answer is: $x \geq -4$.

Question 10c of 14 (2 Dividing Radicals 295335)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: For what values of x is the expression below defined?

	Choice	Feedback
A.	$x > 5$	
B.	x -5	
C.	x 5	
*D.	x -5	Correct!

Global Incorrect Feedback
The correct answer is: x -5.

Alg

Question 11a of 14 (2 Dividing Radicals 117796)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For what values of x is the expression below defined?

$$\sqrt{1-x}$$

	Choice	Feedback
A.	$x > 1$	
B.	$x > -1$	
*C.	$x \leq 1$	Correct!
D.	$x < 1$	

Global Incorrect Feedback
The correct answer is: $x \leq 1$.

Question 11b of 14 (2 Dividing Radicals 295338)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For what values of x is the expression below defined?

$$\sqrt{2-x}$$

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

Global Incorrect Feedback
The correct answer is: $x \leq 2$.

Question 11c of 14 (2 Dividing Radicals 295339)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For what values of x is the expression below defined?

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

Global Incorrect Feedback
The correct answer is: $x \quad 3$.

Alg

Question 12a of 14 (2 Dividing Radicals 117799)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For what values of x is the expression below defined?

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

	Choice	Feedback
A.	$3 > x > 1$	
B.	$3 \leq x \leq 1$	
*C.	$-3 \leq x < 1$	Correct!
D.	$3 > x \leq -1$	

Global Incorrect Feedback
The correct answer is: $-3 \leq x < 1$.

Question 12b of 14 (2 Dividing Radicals 295341)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For what values of x is the expression below defined?

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

	Choice	Feedback
*A.	$-4 \leq x < 1$	Correct!
B.	$4 \leq x \leq 1$	
C.	$4 > x > 1$	
D.	$4 > x \leq -1$	

Global Incorrect Feedback
The correct answer is: $-4 \quad x < 1$.

Question 12c of 14 (2 Dividing Radicals 295343)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: For what values of x is the expression below defined?

	Choice	Feedback
A.	$5 > x > 1$	
B.	$5 \quad x \quad 1$	
C.	$5 > x \quad -1$	
*D.	$-5 \quad x < 1$	Correct!

Global Incorrect Feedback
The correct answer is: $-5 \quad x < 1$.

Alg

Question 13a of 14 (2 Dividing Radicals 117801)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	2
Question:	For what values of x is the expression below defined?

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

	Choice	Feedback
A.	$x = 0$	
B.	$x < 0$	
C.	$x < 1$	
*D.	$x > 0$	Correct!

Global Incorrect Feedback
The correct answer is: $x > 0$.

Question 13b of 14 (2 Dividing Radicals 295345)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	2
Question:	For what values of x is the expression below defined?

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

	Choice	Feedback
A.	$x = 0$	
B.	$x < 0$	
C.	$x < 1$	
*D.	$x > 0$	Correct!

Global Incorrect Feedback
The correct answer is: $x > 0$.

Question 13c of 14 (2 Dividing Radicals 295346)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	2
Question:	For what values of x is the expression below defined?

	Choice	Feedback
A.	$x = 0$	
B.	$x < 0$	
C.	$x < 1$	
*D.	$x > 0$	Correct!

Global Incorrect Feedback
The correct answer is: $x > 0$.

Alg

Question 14a of 14 (3 Dividing Radicals 117826)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

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

	Choice	Feedback
*A.	$x\sqrt{3}$ when x > 0	Correct!
B.	$x\sqrt{3}$ when x > 1	
C.	$x\sqrt{3}$ when x < 0	
D.	$x\sqrt{2x}$ when x > 0	

Global Incorrect Feedback
The correct answer is: $x\sqrt{3}$ when x > 0.

Question 14b of 14 (3 Dividing Radicals 295348)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

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

	Choice	Feedback
A.	$x\sqrt{5}$ when x < 0	
B.	$x\sqrt{5}$ when x > 1	
*C.	when x > 0	Correct!
D.	when x > 0	

Global Incorrect Feedback
The correct answer is: when x > 0.

Question 14c of 14 (3 Dividing Radicals 295350)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

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

Alg

	Choice	Feedback
A.	$x\sqrt{7}$ when x > 1	
***B.**	$x\sqrt{7}$ when x > 0	Correct!
C.	$x\sqrt{7}$ when x < 0	
D.	$x\sqrt{2x}$ when x > 0	

Global Incorrect Feedback
The correct answer is: $x\sqrt{7}$ when x > 0.