PREVIEW   CLOSE

Test (CS): Radical Expressions

Question 1 of 25 (91869)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which choice is equivalent to the product below?

$$\sqrt{45} \cdot \sqrt{10}$$

	Choice	Feedback
A.	$\sqrt{55}$	
***B.**	$15\sqrt{2}$	Correct!
C.	$8\sqrt{2}$	
D.	$5\sqrt{5}$	

Global Incorrect Feedback
The correct answer is: $15\sqrt{2}$.

Question 2 of 25 (295987)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which choice is equivalent to the product below?

$$\sqrt{27} \cdot \sqrt{5}$$

	Choice	Feedback
A.	$2\sqrt{5}$	
B.	$\sqrt{23}$	
***C.**	$3\sqrt{2}$	Correct!
D.		

Global Incorrect Feedback
The correct answer is: .

Question 3 of 25 (91870)

Maximum Attempts:	1
Question Type:	Numeric Fill In Blank
Maximum Score:	3
Correct Answer:	19
Question:	Evaluate the expression below.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 19.

Question 4 of 25 (295989)

Maximum Attempts:	1
Question Type:	Numeric Fill In Blank
Maximum Score:	3
Correct Answer:	31
Question:	Evaluate the expression below.

$$\sqrt{6}\left(\sqrt{11} \cdot \sqrt{7} + \sqrt{6}\right)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 31.

Question 5 of 25 (91871)

Maximum Attempts:	1
Question Type:	Numeric Fill In Blank
Maximum Score:	3
Correct Answer:	10
Question:	Evaluate the expression below.

$$\left(4 - \sqrt{6}\right)\left(\sqrt{6} + 4\right)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 10.

Question 6 of 25 (295991)

Maximum Attempts:	1
Question Type:	Numeric Fill In Blank
Maximum Score:	3
Correct Answer:	8
Question:	Evaluate the expression below.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 8.

Question 7 of 25 (138555)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which choice is equivalent to the product below?

$$\sqrt{\frac{3}{14}} \cdot \sqrt{\frac{7}{8}}$$

	Choice	Feedback
A.	$\sqrt{\frac{11}{21}}$	
*B.	$\frac{\sqrt{3}}{4}$	Correct!
C.	$\frac{2\sqrt{3}}{7}$	

Global Incorrect Feedback
The correct answer is: $\frac{\sqrt{3}}{4}$.

Question 8 of 25 (138557)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which inequality represents all values of x for which the product below is defined?

	Choice	Feedback
A.	$x < 0$	
B.	x 0	
*C.	x 2	Correct!
D.	$x > 2$	

Global Incorrect Feedback
The correct answer is: x 2.

Question 9 of 25 (295997)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which inequality represents all values of x for which the product below is defined?

$$\sqrt[4]{x^2} \cdot \sqrt{x-3}$$

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

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

Question 10 of 25 (91874)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which choice is equivalent to the product below when $x > 0$?

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

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

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

Question 11 of 25 (91875)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which choice is equivalent to the product below when $x > 0$?

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

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

Question 12 of 25 (296001)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 3

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

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

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

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

Question 13 of 25 (91876)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 3

Question: Which choice is equivalent to the expression below?

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

Global Incorrect Feedback
The correct answer is: .

Question 14 of 25 (296004)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 3

Question: Which choice is equivalent to the expression below?

$$\sqrt{3x} \quad \sqrt{2x} \quad 4\sqrt{x}$$

	Choice	Feedback
A.	$\sqrt{1\cdots} + 4\sqrt{x}$	
*B.	$5\sqrt{x}$	Correct!
C.	$5\sqrt{2x} \quad 4\sqrt{x}$	
D.	$17\sqrt{x}$	

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

Question 15 of 25 (91877)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 3

Question: Which choice is equivalent to the expression below?

$$\sqrt{6} + 2\sqrt{3} + \sqrt{27} - \sqrt{12}$$

	Choice	Feedback
A.	$5\sqrt{3}$	
B.	$5\sqrt{3} - 6$	
C.	$2\sqrt{3} - \sqrt{21}$	
*D.	$3\sqrt{3} + \sqrt{6}$	Correct!

Global Incorrect Feedback
The correct answer is: .

Question 16 of 25 (91878)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 3

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

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

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

Question 17 of 25 (296008)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 3

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

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

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

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

Question 18 of 25 (91879)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 3

Question: Which choice is equivalent to the quotient below when -3 x < 3?

	Choice	Feedback
*A.		Correct!
B.		
C.		
D.	1	

Global Incorrect Feedback
The correct answer is: .

Question 19 of 25 (91880)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which choice is equivalent to the quotient below when $x > 0$?

$$\sqrt{6x + 27x^3} \div \sqrt{3x}$$

	Choice	Feedback
A.	$\sqrt{2} + 3x$	
*B.	$\sqrt{2 + 9x^2}$	Correct!
C.	$\sqrt{2 + 27x^3}$	
D.	$\sqrt{3x + 27x^3}$	

Global Incorrect Feedback
The correct answer is: $\sqrt{2 + 9x^2}$.

Question 20 of 25 (296013)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which choice is equivalent to the quotient below when $x > 0$?

$$\sqrt{6x + 27x^3} \div \sqrt{3x}$$

	Choice	Feedback
A.	$\sqrt{2} + 3x$	
B.	$\sqrt{2} + 10x^2$	
*C.	$\sqrt{2 + 9x^2}$	Correct!
D.	$\sqrt{2x + 18x^2}$	

Global Incorrect Feedback
The correct answer is: .

Question 21 of 25 (91881)

Maximum Attempts:	1
Question Type:	Numeric Fill In Blank
Maximum Score:	3
Correct Answer:	3
Question:	Rationalize the denominator of the fraction and enter the new denominator below.

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 3.

Question 22 of 25 (296015)

Maximum Attempts:	1
Question Type:	Numeric Fill In Blank
Maximum Score:	3
Correct Answer:	2
Question:	Rationalize the denominator of the fraction and enter the new denominator below.

$$\frac{4}{2\sqrt{7}}$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback
	Correct!

	Global Incorrect Feedback
	The correct answer is: 2.

Question 23 of 25 (91882)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which choice is equivalent to the fraction below? *(Hint: Rationalize the denominator and simplify.)*

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

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

Global Incorrect Feedback	
The correct answer is:	.

Question 24 of 25 (91883)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which choice is equivalent to the fraction below? *(Hint: Rationalize the denominator and simplify.)*

$$\frac{2}{\sqrt{x} + \sqrt{x + 2}}$$

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

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

Question 25 of 25 (296019)

Maximum Attempts:	1
Question Type:	Multiple Choice
Maximum Score:	3
Question:	Which choice is equivalent to the fraction below? *(Hint: Rationalize the denominator and simplify.)*

$$\frac{2}{\sqrt{x} + \sqrt{x + 2}}$$

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

Global Incorrect Feedback
The correct answer is: .