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?

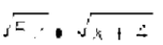
$\sqrt{5x} \cdot \sqrt{x+3}$

	Choice	Feedback
A.	$x \leq -3$	
***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?



	Choice	Feedback
A.	$x \leq -4$	
***B.**	$x \geq 0$	Correct!
C.	$x \geq -4$	
D.	$x > 0$	

Global Incorrect Feedback
The correct answer is: x 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?

	Choice	Feedback
A.	x -2	
B.	x -2	
***C.**	x 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?

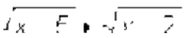
$\sqrt{x-4} \bullet \sqrt{x+1}$

	Choice	Feedback
A.	$x \leq 4$	
B.	$x \geq -1$	
***C.**	$x \geq 4$	Correct!
D.	$x \geq 0$	

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

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?



	Choice	Feedback
A.	$x \leq 5$	
B.	$x \geq -2$	
C.	$x \geq 0$	
***D.**	$x \geq 5$	Correct!

Global Incorrect Feedback
The correct answer is: x 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?

	Choice	Feedback
***A.**	x 6	Correct!
B.	x -3	
C.	x 6	
D.	x 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?

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

	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?

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

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

Global Incorrect Feedback
The correct answer is: .

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?

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

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

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*?

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

Global Incorrect Feedback
The correct answer is: .

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?

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

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

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

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.	$5\sqrt{3x}$	
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?

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

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 $x \geq 0$?

$\sqrt{3x^2} \cdot \sqrt{18x^2}$

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

Global Incorrect Feedback
The correct answer is: .

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 0?

Alg

	Choice	Feedback
A.	$\sqrt{15x^2}$	
***B.**	$5x\sqrt{2x}$	Correct!
C.	$5\sqrt{2}$	
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.	$2\sqrt{2x^3}$	
***B.**	$2x\sqrt{2x}$	Correct!
C.	$\sqrt{8x}$	
D.	$\sqrt{8x^3}$	

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

Question 7a of 15 (3 Multiplying Radicals 92021)

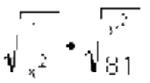
Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Which choice is equivalent to the product below when $x > 0$?

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

Global Incorrect Feedback
The correct answer is: .

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 $x > 0$?

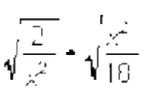


	Choice	Feedback
A.	$\frac{x}{81}$	
B.	$\frac{\sqrt{x}}{81}$	
***C.**	$\frac{1}{9}$	Correct!
D.	$\frac{x}{9}$	

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 $x > 0$?



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

Global Incorrect Feedback
The correct answer is: .

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 $x > 0$?

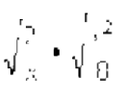
$$\sqrt{\frac{6}{x}} \cdot \sqrt{\frac{x^2}{24}}$$

	Choice	Feedback
A.	$\frac{x}{2}$	
B.	$\frac{x}{4}$	
C.	$\sqrt{\frac{x}{2}}$	
***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 $x > 0$?

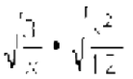


	Choice	Feedback
A.	$\frac{x}{2}$	
***B.**		Correct!
C.		
D.		

Global Incorrect Feedback
The correct answer is: .

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 $x > 0$?



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

	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 $\sqrt{x2}$.

	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?

$(\quad)^2 = B$

	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?

$(\quad)^2 = B$

	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 Feedback
The correct answer is: $x +$ $- 6$.

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.

$(\quad + 3)(\quad - 4)$

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

Global Incorrect Feedback
The 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 Feedback
The 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.

$$(\quad - 4)(\quad - 5)$$

	Choice	Feedback
A.	- - + 20	
B.	- + 20	
***C.**	- - + 20	Correct!
D.	- + 20	

Global Incorrect Feedback
The 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: $x\sqrt{2} + 4\sqrt{x} - 5\sqrt{2x} - 20$.