

PREVIEW

CLOSE

Quiz: Graphs of Quadratic Functions

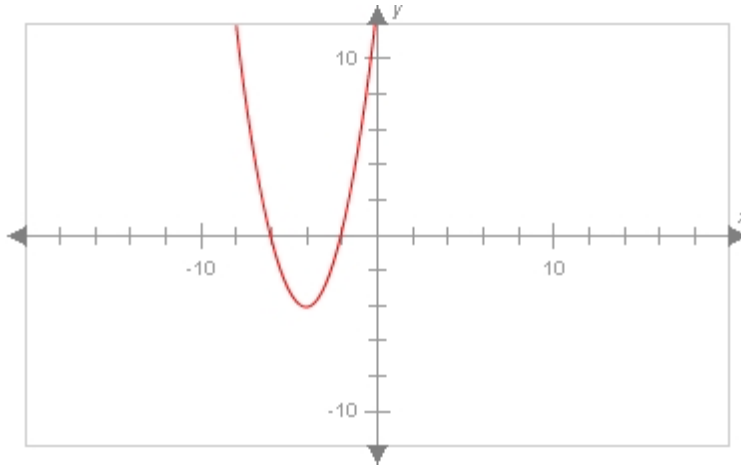
Question 1a of 15 (3 Graphing Quadratic Equations 148627)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following functions best describes this graph?



	Choice	Feedback
A.	$y = x^2 - 7x + 7$	
B.	$y = (x + 5)(x - 4)$	
C.	$y = (x - 4)(x - 1)$	
*D.	$y = x^2 + 8x + 12$	Correct!

Global Incorrect Feedback
 The correct answer is: $y = x^2 + 8x + 12$.

Question 1b of 15 (3 Graphing Quadratic Equations 244979)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following functions best describes this graph?

Alg

	Choice	Feedback
A.	$y = x^2 - 2x + 4$	
*B.	$y = x^2 + 3x - 18$	Correct!
C.	$y = (x - 7)(x - 4)$	
D.	$y = (x + 5)(x - 4)$	

Global Incorrect Feedback

The correct answer is: $y = x^2 + 3x - 18$.

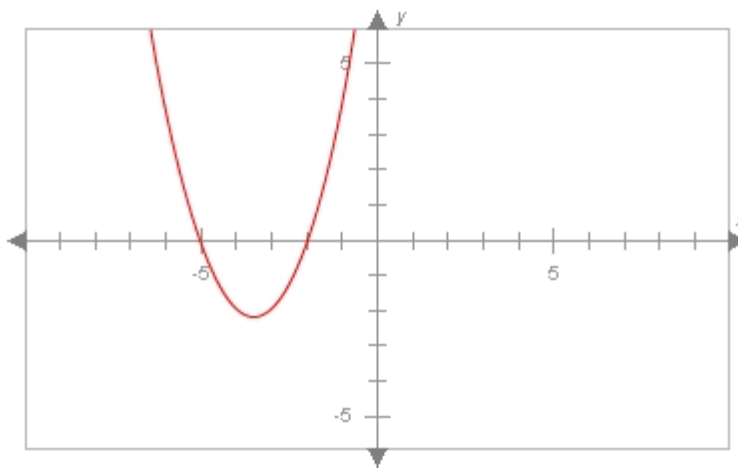
Question 1c of 15 (3 Graphing Quadratic Equations 244980)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following functions best describes this graph?



	Choice	Feedback
*A.	$y = x^2 + 7x + 12$	Correct!
B.	$y = (x + 5)(x - 3)$	
C.	$y = (x - 7)(x - 4)$	
D.	$y = x^2 + 5x + 12$	

Global Incorrect Feedback

The correct answer is: .

Alg

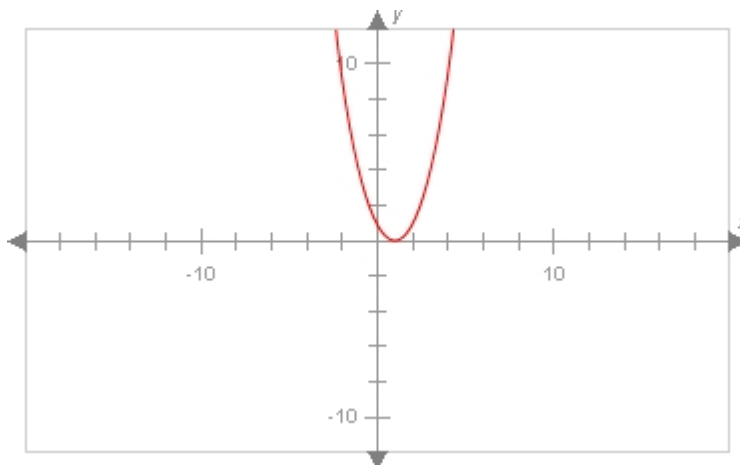
Question 2a of 15 (3 Graphing Quadratic Equations 148628)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following functions best describes this graph?



	Choice	Feedback
A.	$y = x^2 - x + 5$	
*B.	$y = (x - 1)(x - 3)$	Correct!
C.	$y = x^2 - 5x + 6$	
D.	$y = (x - 2)(x + 1)$	

Global Incorrect Feedback
The correct answer is: $y = (x - 1)(x - 3)$.

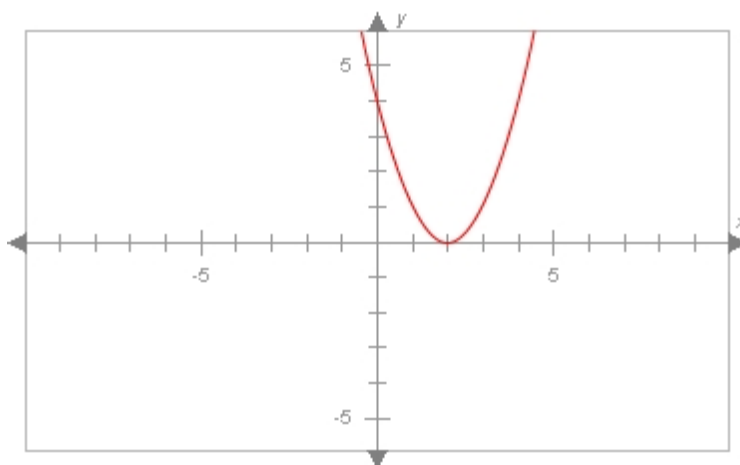
Question 2b of 15 (3 Graphing Quadratic Equations 244981)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following functions best describes this graph?



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

Global Incorrect Feedback
 The correct answer is: $y = (x - 2)(x - 2)$.

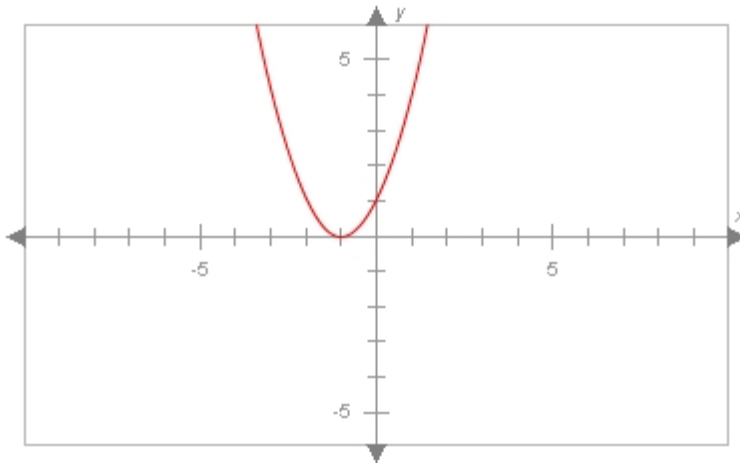
Question 2c of 15 (3 Graphing Quadratic Equations 244982)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following functions best describes this graph?



	Choice	Feedback
A.	$y = x^2 - x + 5$	
B.	$y = (x - 1)(x - 3)$	
C.	$y = x^2 - 5x + 2$	
*D.	$y = (x - 1)(x - 1)$	Correct!

Global Incorrect Feedback
 The correct answer is: $y = (x - 1)(x + 1)$.

Question 3a of 15 (3 Graphing Quadratic Equations 148629)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following functions best describes this graph?

Alg

	Choice	Feedback
*A.	$y = x^2 - 5x + 18$	Correct!
B.	$y = (x - 3)(x + 4)$	
C.	$y = x^2 - 5x + 6$	
D.	$y = (x + 1)(x + 1)$	

Global Incorrect Feedback

The correct answer is: $y = x^2 - 6x + 18$.

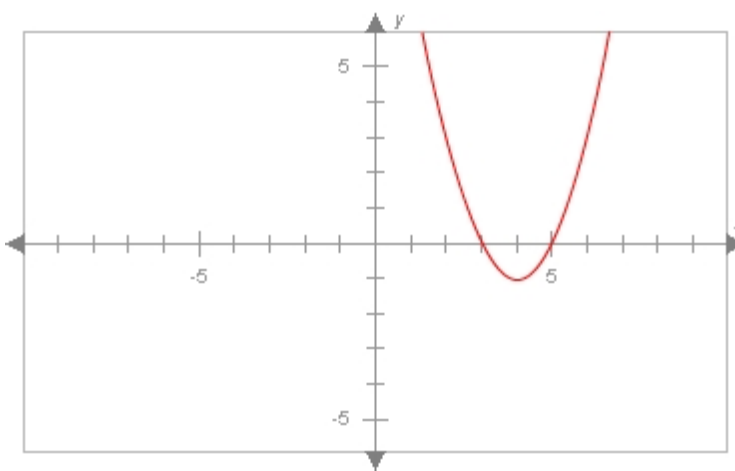
Question 3b of 15 (3 Graphing Quadratic Equations 244984)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following functions best describes this graph?



	Choice	Feedback
A.	$y = x^2 - 5x + 6$	
B.	$y = (x - 3)(x + 4)$	
*C.	$y = x^2 - 6x + 15$	Correct!
D.	$y = (x + 2)(x + 3)$	

Global Incorrect Feedback

The correct answer is: .

Alg

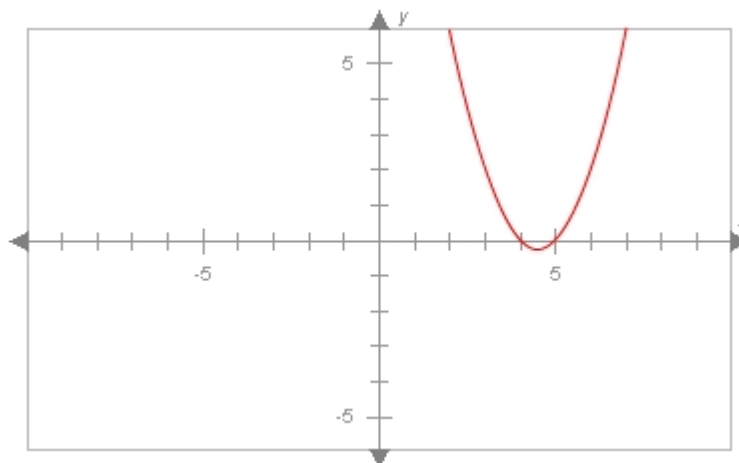
Question 3c of 15 (3 Graphing Quadratic Equations 244985)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following functions best describes this graph?



	Choice	Feedback
A.	$y = x^2 - 8x + 8$	
B.	$y = (x - 3)(x - 4)$	
C.	$y = (x + 1)(x - 1)$	
*D.	$y = x^2 - 9x + 20$	Correct!

Global Incorrect Feedback
The correct answer is: $y = x^2 - 9x + 20$.

Question 4a of 15 (3 Graphing Quadratic Equations 148630)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which graph is defined by the function given below?

$$y = (x - 1)(x + 4)$$

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

Global Incorrect Feedback
The correct answer is: Graph C.

Alg

Question 4b of 15 (3 Graphing Quadratic Equations 244986)

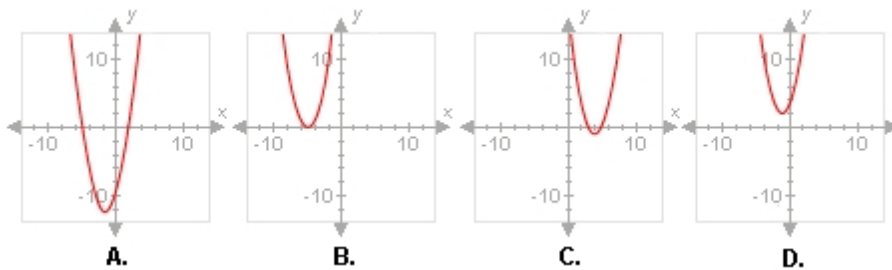
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which graph is defined by the function given below?

$$y = (x - 2)(x - 5)$$



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

Global Incorrect Feedback

The correct answer is: Graph A.

Question 4c of 15 (3 Graphing Quadratic Equations 244987)

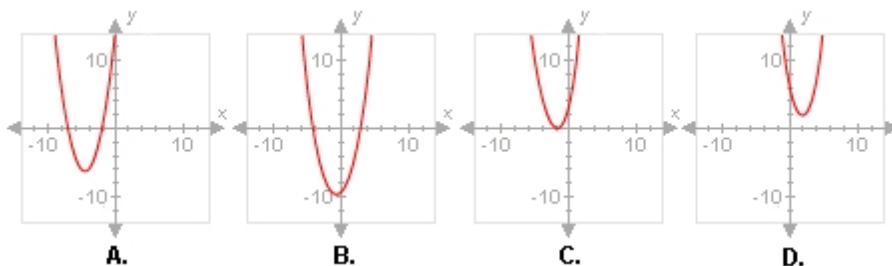
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which graph is defined by the function given below?

$$y = (x - 3)(x + 4)$$



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

Global Incorrect Feedback

The correct answer is: Graph B.

Alg

Question 5a of 15 (3 Graphing Quadratic Equations 148631)

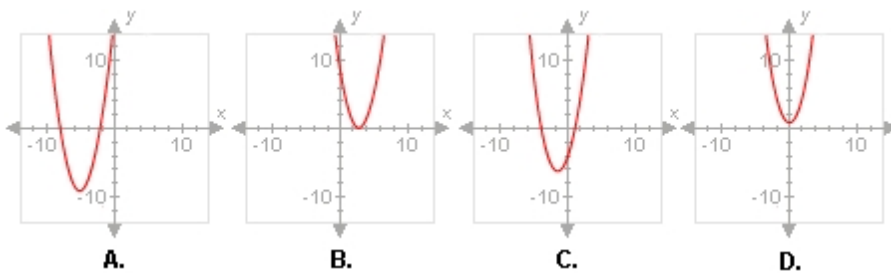
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which graph is defined by the function given below?

$$y = (x + 6)(x - 2)$$



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

Global Incorrect Feedback

The correct answer is: Graph A.

Question 5b of 15 (3 Graphing Quadratic Equations 244988)

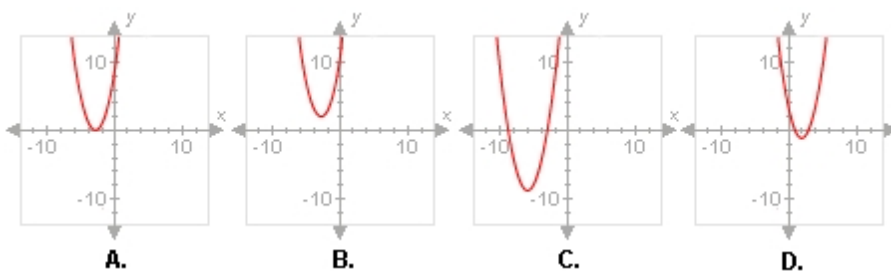
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which graph is defined by the function given below?

$$y = (x + 9)(x - 3)$$



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

Global Incorrect Feedback

The correct answer is: Graph C.

Alg

Question 5c of 15 (3 Graphing Quadratic Equations 244989)

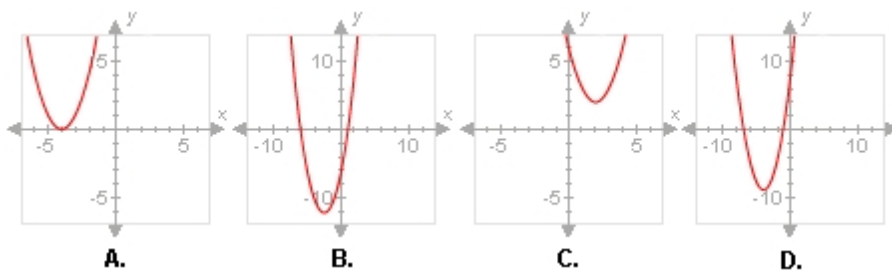
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which graph is defined by the function given below?

$$y = (x - 7)(x - 11)$$



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

Global Incorrect Feedback

The correct answer is: Graph D.

Question 6a of 15 (3 Graphing Quadratic Equations 148632)

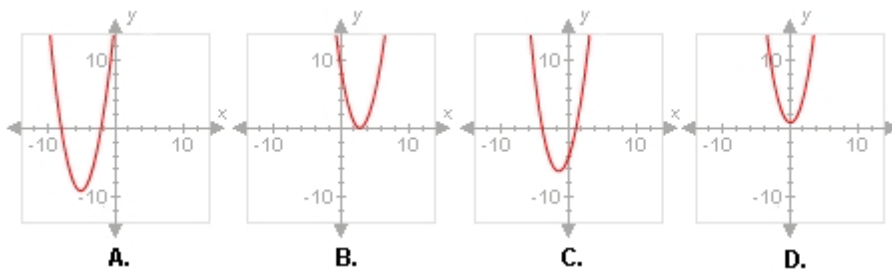
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which graph is defined by the function given below?

$$y = (x - 3)(x - 3)$$



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

Global Incorrect Feedback

The correct answer is: Graph B.

Alg

Question 6b of 15 (3 Graphing Quadratic Equations 244990)

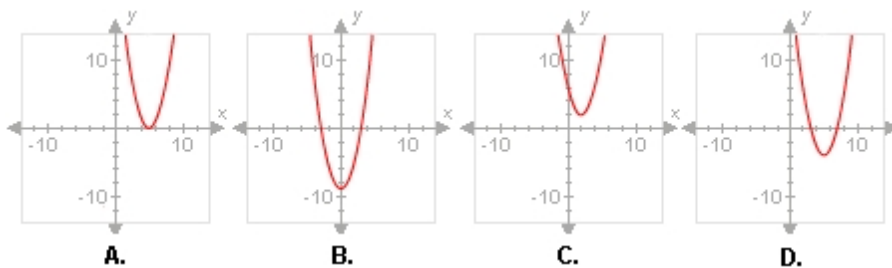
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which graph is defined by the function given below?

$$y = (x - 5)(x - 5)$$



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

Global Incorrect Feedback

The correct answer is: Graph A.

Question 6c of 15 (3 Graphing Quadratic Equations 244991)

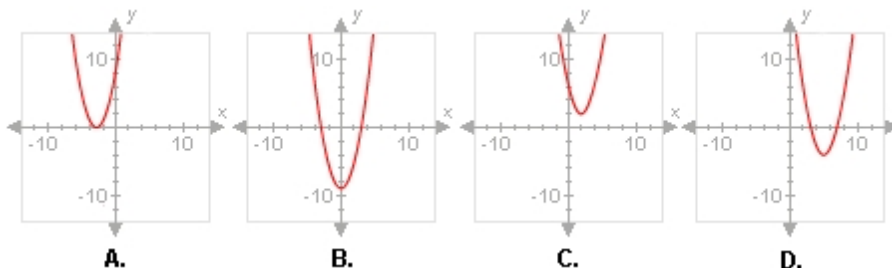
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which graph is defined by the function given below?

$$y = (x + 3)(x - 3)$$



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

Global Incorrect Feedback

The correct answer is: Graph A.

Alg

Question 7a of 15 (3 Graphing Quadratic Equations 148633)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: (4, -4), (4,-4)

Question: Find the vertex of the function. Write your answer in the form (x,y). Use the slash mark (/) as a fraction bar if necessary.

$$y = x^2 - 8x + 12$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (4,-4).

Question 7b of 15 (3 Graphing Quadratic Equations 244993)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: (3, -3), (3,-3)

Question: Find the vertex of the function. Find the vertex of the function. Write your answer in the form (x,y). Use the slash mark (/) as a fraction bar if necessary.

$$y = x^2 - 6x + 6$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (3,-3).

Question 7c of 15 (3 Graphing Quadratic Equations 244994)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: (5, -5), (5,-5)

Question: Find the vertex of the function. Write your answer in the form (x,y). Use the slash mark (/) as a fraction bar if necessary.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

Alg

	Global Incorrect Feedback
	The correct answer is: (5,-5).

Question 8a of 15 (3 Graphing Quadratic Equations 148634)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: (3/2, -93/4), (3/2, - 93/4), (3/2,- 93/4)
Question: Find the vertex of the function. Write your answer in the form (x,y). Use the slash mark (/) as a fraction bar if necessary.

$$y = x^2 - 3x - 2$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (3/2,-93/4).

Question 8b of 15 (3 Graphing Quadratic Equations 244995)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: (5/2, -85/4)
Question: Find the vertex of the function. Write your answer in the form (x,y). Use the slash mark (/) as a fraction bar if necessary.

$$y = x^2 - 5x - 5$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (5/2,-85/4).

Question 8c of 15 (3 Graphing Quadratic Equations 244996)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: (1/2, -93/4), (1/2,-93/4), (1/2, - 93/4), (1/2,- 93/4)
Question: Find the vertex of the function. Write your answer in the form (x,y). Use the slash mark as a fraction bar if necessary.

Attempt	Incorrect Feedback
1st	

Alg

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (1/2,-93/4).

Question 9a of 15 (3 Graphing Quadratic Equations 148635)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: (-4, -1), (-4,-1)
Question: Find the vertex of the function. Write your answer in the form (x,y). Use the slash mark (/) as a fraction bar if necessary.

$$y = x^2 - 8x + 5$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (-4,-1).

Question 9b of 15 (3 Graphing Quadratic Equations 244997)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: (-3, -2), (-3,-2)
Question: Find the vertex of the function. Write your answer in the form (x,y). Use the slash mark (/) as a fraction bar if necessary.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (-3,-2).

Alg

Question 9c of 15 (3 Graphing Quadratic Equations 244998)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: (-5, -3), (-5,-3)

Question: Find the vertex of the function. Write your answer in the form (x,y). Use the slash mark (/) as a fraction bar if necessary.

$$y = x^2 - 10x + 22$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: (-5,-3).

Question 10a of 15 (3 Graphing Quadratic Equations 153034)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Find the vertex and x-intercept(s) of the function given below.

$$y = (x - 4)(x - 2)$$

	Choice	Feedback
A.	Vertex: (1,9); Intercepts: x = -4, -2	
B.	Vertex: (1,-5); Intercepts: x = -4, 2	
*C.	Vertex: (1,-9); Intercepts: x = 4, -2	Correct!
D.	Vertex: (-4,2); Intercepts: x = 3, -3	

Global Incorrect Feedback
The correct answer is: Vertex: (1,-9); Intercepts: x = 4, -2.

Question 10b of 15 (3 Graphing Quadratic Equations 244999)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Find the vertex and x-intercept(s) of the function given below.

Alg

	Choice	Feedback
*A.	Vertex: (-3,-1); Intercepts: $x = -4, -2$	Correct!
B.	Vertex: (1,-5); Intercepts: $x = -4, 2$	
C.	Vertex: (1,-9); Intercepts: $x = 4, -2$	
D.	Vertex: (-4,2); Intercepts: $x = 3, -3$	

Global Incorrect Feedback
The correct answer is: Vertex: (-3,-1); Intercepts: $x = -4, -2$.

Question 10c of 15 (3 Graphing Quadratic Equations 245000)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Find the vertex and x-intercept(s) of the function given below.

$$y = (x + 4)(x - 2)$$

	Choice	Feedback
A.	Vertex: (1,9); Intercepts: $x = -4, -2$	
*B.	Vertex: (-1,-9); Intercepts: $x = -4, 2$	Correct!
C.	Vertex: (1,-9); Intercepts: $x = 4, -2$	
D.	Vertex: (-4,2); Intercepts: $x = 3, -3$	

Global Incorrect Feedback
The correct answer is: Vertex: (-1,-9); Intercepts: $x = -4, 2$.

Question 11a of 15 (3 Graphing Quadratic Equations 153035)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Find the vertex and x-intercept(s) of the function given below.

	Choice	Feedback
A.	Vertex: (0,6); Intercepts: $x = -2, 6$	
*B.	Vertex: (1,5); Intercepts: none	Correct!
C.	Vertex: (-1,9); Intercepts: none	
D.	Vertex: (-2,6); Intercepts: $x = 1, 6$	

Global Incorrect Feedback
The correct answer is: Vertex: (1,5); Intercepts: none.

Question 11b of 15 (3 Graphing Quadratic Equations 245001)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Find the vertex and x-intercept(s) of the function given below.

$$y = x^2 - 2x + 6$$

	Choice	Feedback
A.	Vertex: (0,6); Intercepts: $x = -2, 6$	
B.	Vertex: (1,5); Intercepts: none	
*C.	Vertex: (-1,5); Intercepts: none	Correct!
D.	Vertex: (-2,6); Intercepts: $x = 1, 6$	

Global Incorrect Feedback

The correct answer is:
Vertex: (-1,5);
Intercepts: none.

Question 11c of 15 (3 Graphing Quadratic Equations 245002)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Find the vertex and x-intercept(s) of the function given below.

$$y = x^2 - 4x - 7$$

	Choice	Feedback
*A.	Vertex: (-2,3); Intercepts: none	Correct!
B.	Vertex: (1,5); Intercepts: $x = -2, 6$	
C.	Vertex: (-1,9); Intercepts: none	
D.	Vertex: (-2,6); Intercepts: $x = 1, 6$	

Global Incorrect Feedback

The correct answer is:
Vertex: (-2,3);
Intercepts: none.

Question 12a of 15 (2 Graphing Quadratic Equations 328550)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: When the graph of a quadratic function crosses the x-axis twice, the x-coordinate of the vertex lies _____ between the two x-intercepts.

Alg

	Choice	Feedback
A.	around halfway	
*B.	exactly halfway	Correct!
C.	anywhere	

Global Incorrect Feedback
The correct answer is: exactly halfway.

Question 12b of 15 (2 Graphing Quadratic Equations 328551)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: When the graph of a quadratic function crosses the x-axis twice, the x-coordinate of the _____ lies exactly halfway between the two x-intercepts.

	Choice	Feedback
A.	origin	
B.	y-intercept	
*C.	vertex	Correct!

Global Incorrect Feedback
The correct answer is: vertex.

Question 12c of 15 (2 Graphing Quadratic Equations 328552)

Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: When the graph of a quadratic function crosses the x-axis twice, the _____ of the vertex lies exactly halfway between the two x-intercepts.

	Choice	Feedback
*A.	x-coordinate	Correct!
B.	y-coordinate	
C.	y-axis	

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

Question 13a of 15 (2 Graphing Quadratic Equations 148639)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: factors

Question: You can easily identify the x-intercepts of the graph of a quadratic function by writing it as two binomial _____.

Attempt	Incorrect Feedback
1st	

Alg

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: factors.

Question 13b of 15 (2 Graphing Quadratic Equations 245005)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: factors

Question: You can easily identify the x-intercepts of the graph of a quadratic function by writing it as two binomial _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: factors.

Question 13c of 15 (2 Graphing Quadratic Equations 245006)

Maximum Attempts: 1

Question Type: Text Fill In Blank

Maximum Score: 2

Is Case Sensitive: false

Correct Answer: factors

Question: You can easily identify the x-intercepts of the graph of a quadratic function by writing it as two binomial _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: factors.

Question 14a of 15 (3 Graphing Quadratic Equations 148640)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 1

Question: Find the x-coordinate of the vertex of the function given below. You may enter just the number.

Attempt	Incorrect Feedback
1st	

Alg

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 1.

Question 14b of 15 (3 Graphing Quadratic Equations 245007)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 1

Question: Find the x-coordinate of the vertex of the function given below. You may enter just the number.

$$y = (x - 6)(x - 4)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 1.

Question 14c of 15 (3 Graphing Quadratic Equations 245008)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: 1

Question: Find the x-coordinate of the vertex of the function given below. You may enter just the number.

$$y = (x - 7)(x - 5)$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: 1.

Question 15a of 15 (3 Graphing Quadratic Equations 148641)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -5

Question: Find the x-coordinate of the vertex of the function given below. You may enter just the number.

Attempt	Incorrect Feedback
1st	

Alg

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: -5.

Question 15b of 15 (3 Graphing Quadratic Equations 245009)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -6

Question: Find the x-coordinate of the vertex of the function given below. You may enter just the number.

$$y = x^2 - 12x + 47$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: -6.

Question 15c of 15 (3 Graphing Quadratic Equations 245010)

Maximum Attempts: 1

Question Type: Numeric Fill In Blank

Maximum Score: 2

Correct Answer: -7

Question: Find the x-coordinate of the vertex of the function given below. You may enter just the number.

$$y = x^2 - 14x + 27$$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: -7.