PREVIEW CLOSE

Quiz: Working with the Discriminant

Question 1a of 10 (3 Graphing Quadratic Equations 148644)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Find the vertex of the function given below.

$y = x^2 - 4x + 1$

	Choice	Feedback
A.	(1,5)	
***B.**	(2,-3)	Correct!
C.	(4,1)	
D.	(-2,13)	

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

Question 1b of 10 (3 Graphing Quadratic Equations 245034)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Find the vertex of the function given below.

$y = x^2 - 6x + 1$

	Choice	Feedback
A.	(1,5)	
B.	(2,-3)	
C.	(4,1)	
***D.**	(3,-8)	Correct!

Global Incorrect Feedback
The correct answer is: (3,-8).

Question 1c of 10 (3 Graphing Quadratic Equations 245035)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Find the vertex of the function given below.

$y = x^2 - 2x + 1$

	Choice	Feedback
***A.**	(1,0)	Correct!
B.	(2,-3)	
C.	(1,1)	
D.	(-2,13)	

Global Incorrect Feedback
The correct answer is: (1,0).

Question 2a of 10 (3 Graphing Quadratic Equations 148645)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Find the vertex of the function given below.

$y = 2x^2 + 4x + 1$

	Choice	Feedback
*A.	(-1,-1)	Correct!
B.	(1,7)	
C.	(3,-4)	
D.	(-4,9)	

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

Question 2b of 10 (3 Graphing Quadratic Equations 245036)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Find the vertex of the function given below.

$y = 2x^2 + 8x + 1$

	Choice	Feedback
A.	(-2,-1)	
B.	(1,7)	
C.	(3,-4)	
*D.	(-2,-7)	Correct!

Global Incorrect Feedback
The correct answer is: (-2,-7).

Question 2c of 10 (3 Graphing Quadratic Equations 245038)

Maximum Attempts: 1
Question Type: Multiple Choice
Maximum Score: 2
Question: Find the vertex of the function given below.

$y = 3x^2 + 6x + 1$

	Choice	Feedback
A.	(-1,-1)	
B.	(1,7)	
*C.	(-1,-2)	Correct!
D.	(-4,9)	

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

Question 3a of 10 (3 Graphing Quadratic Equations 153077)

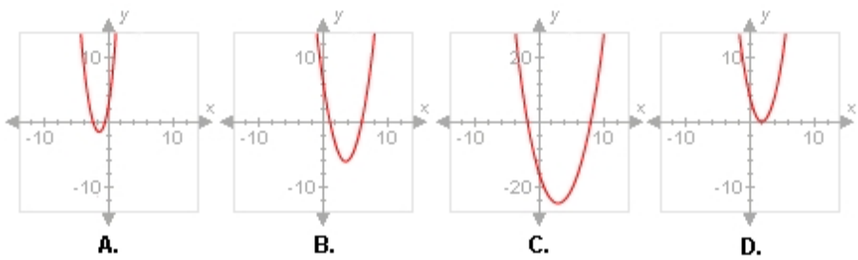
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following graphs is the one described by the function given below?

$y = x^2 - 6x - 16$



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

Global Incorrect Feedback
The correct answer is: Graph C.

Question 3b of 10 (3 Graphing Quadratic Equations 245039)

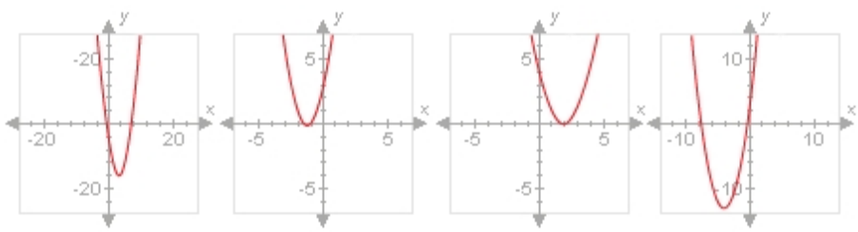
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following graphs is the one described by the function given below?

$y = x^2 - 6x - 7$



	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 3c of 10 (3 Graphing Quadratic Equations 245040)

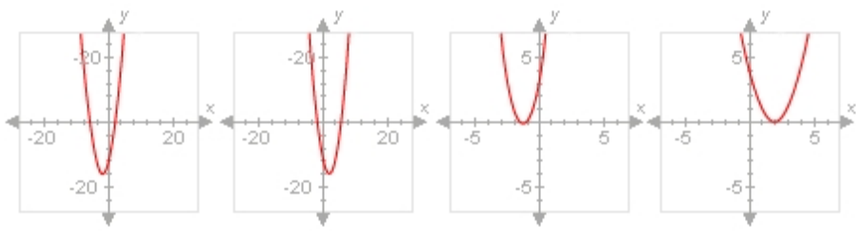
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following graphs is the one described by the function given below?

$y = x^2 - 4x - 12$



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

Global Incorrect Feedback
The correct answer is: Graph B.

Question 4a of 10 (3 Graphing Quadratic Equations 153103)

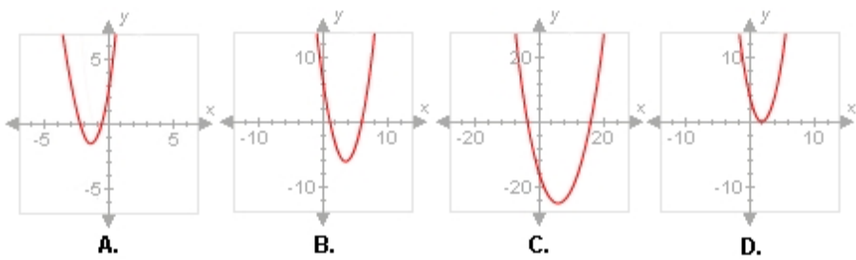
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following graphs is the one described by the function given below?

$y = 2x^2 + 6x + 3$



A. **B.** **C.** **D.**

	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 4b of 10 (3 Graphing Quadratic Equations 245041)

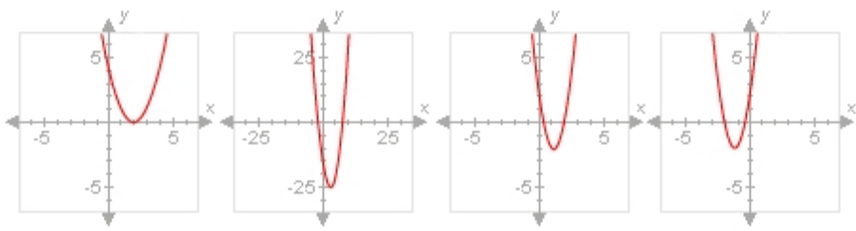
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following graphs is the one described by the function given below?

$y = 3x^2 + 7x + 2$



	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 4c of 10 (3 Graphing Quadratic Equations 245042)

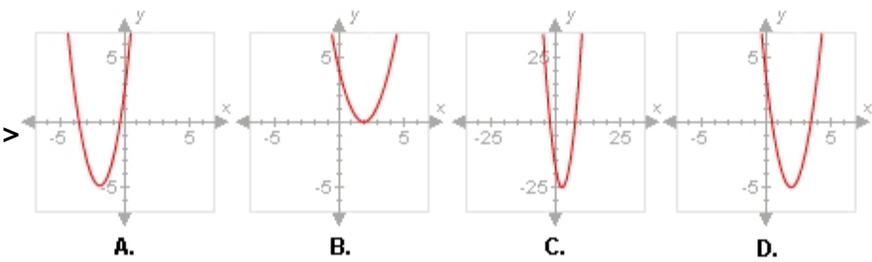
Maximum Attempts: 1

Question Type: Multiple Choice

Maximum Score: 2

Question: Which of the following graphs is the one described by the function given below?

$y = 2x^2 + 8x + 3$

> 

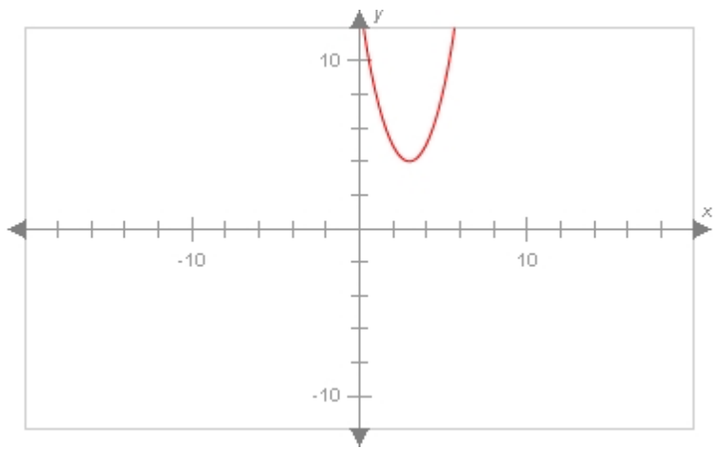
	Choice	Feedback
***A.**	Graph A	Correct!
B.	Graph B	
C.	Graph C	
D.	Graph D	

Global Incorrect Feedback
The correct answer is: Graph A.

Question 5a of 10 (2 Graphing Quadratic Equations 148646)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: negative, minus, -, negitive
Question: Using the graph as your guide, complete the following statement.

The discriminant of the function is _____.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: negative.

Question 5b of 10 (2 Graphing Quadratic Equations 245044)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: negative, minus, -, negitive
Question: Using the graph as your guide, complete the following statement.

The discriminant of the function is _____.

Attempt	Incorrect Feedback
1st	

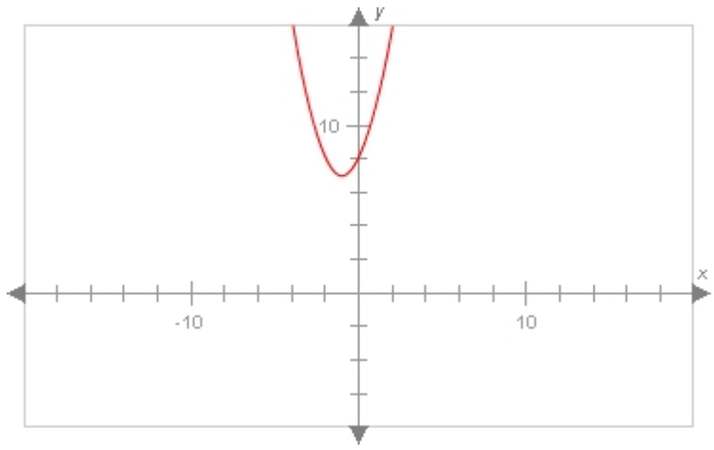
	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: negative.

Question 5c of 10 (2 Graphing Quadratic Equations 245045)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: negative, minus, -, negitive
Question: Using the graph as your guide, complete the following statement.

The discriminant of the function is _____.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: negative.

Question 6a of 10 (2 Graphing Quadratic Equations 148647)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: positive, plus, +, posative
Question: Using the graph as your guide, complete the following statement.

The discriminant of the function is _____.

Attempt	Incorrect Feedback
1st	

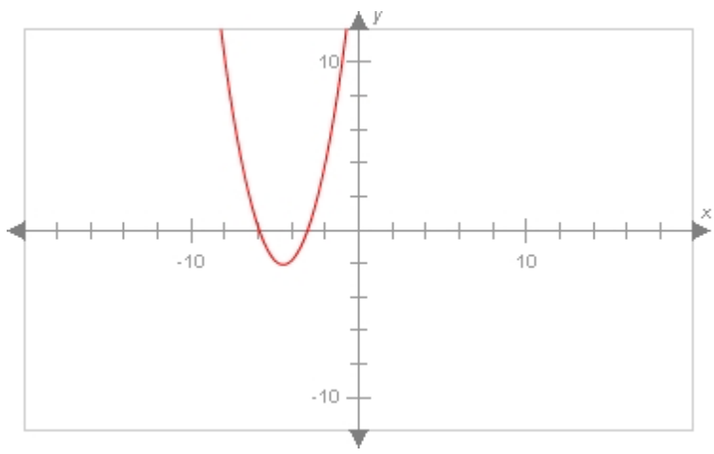
	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: positive.

Question 6b of 10 (2 Graphing Quadratic Equations 245046)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: positive, plus, +, posative
Question: Using the graph as your guide, complete the following statement.

The discriminant of the function is _____.



Attempt	Incorrect Feedback
1st	

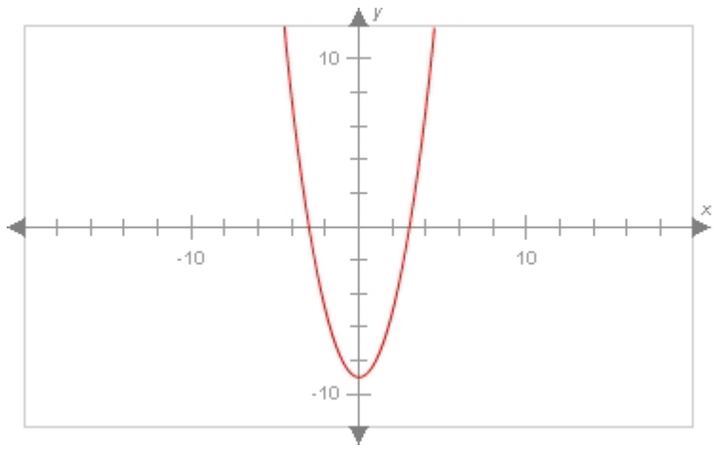
	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: positive.

Question 6c of 10 (2 Graphing Quadratic Equations 245047)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: positive, plus, +, posative
Question: Using the graph as your guide, complete the following statement.

The discriminant of the function is _____.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: positive.

Question 7a of 10 (2 Graphing Quadratic Equations 148648)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: zero, 0, nothing
Question: Using the graph as your guide, complete the following statement.

The discriminant of the function is _____.

Attempt	Incorrect Feedback
1st	

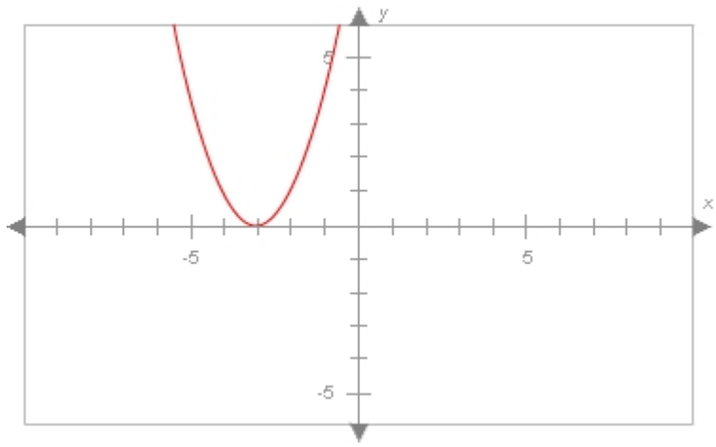
	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: zero.

Question 7b of 10 (2 Graphing Quadratic Equations 245048)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: zero, 0, nothing
Question: Using the graph as your guide, complete the following statement.

The discriminant of the function is _____.



Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: zero.

Question 7c of 10 (2 Graphing Quadratic Equations 245049)

Maximum Attempts: 1
Question Type: Text Fill In Blank
Maximum Score: 2
Is Case Sensitive: false
Correct Answer: zero, 0, nothing
Question: Using the graph as your guide, complete the following statement.

The discriminant of the function is _____.

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: zero.

Question 8a of 10 (2 Graphing Quadratic Equations 153143)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2
Question: The function below crosses the *x*-axis twice.

$$2x^2 - 3x + 1$$

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 8b of 10 (2 Graphing Quadratic Equations 245050)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2
Question: The function below crosses the *x*-axis.

$y = 3x^2 - 5x + 1$

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 8c of 10 (2 Graphing Quadratic Equations 245051)

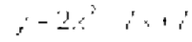
Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2
Question: The function below crosses the *x*-axis.

	Choice	Feedback
*A.	True	Correct!
B.	False	

Global Incorrect Feedback
The correct answer is: True.

Question 9a of 10 (2 Graphing Quadratic Equations 153145)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2
Question: The function below crosses the *x*-axis once.

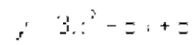


	Choice	Feedback
A.	True	
***B.**	False	Correct!

Global Incorrect Feedback
The correct answer is: False.

Question 9b of 10 (2 Graphing Quadratic Equations 245052)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2
Question: The function below crosses the *x*-axis once.



	Choice	Feedback
A.	True	
***B.**	False	Correct!

Global Incorrect Feedback
The correct answer is: False.

Question 9c of 10 (2 Graphing Quadratic Equations 245053)

Maximum Attempts: 1
Question Type: True-False
Maximum Score: 2
Question: The function below crosses the *x*-axis once.

	Choice	Feedback
A.	True	
***B.**	False	Correct!

Global Incorrect Feedback
The correct answer is: False.

Question 10a of 10 (2 Graphing Quadratic Equations 153146)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 2
Question: How many times does the graph of the function below touch or cross the *x*-axis?

$3x^2 + 8x + 5$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: Two.

Question 10b of 10 (2 Graphing Quadratic Equations 245054)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 2
Question: How many times does the graph of the function below touch or cross the *x*-axis?

$2x^2 + 7x + 5$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: Two.

Question 10c of 10 (2 Graphing Quadratic Equations 245055)

Maximum Attempts: 1
Question Type: Numeric Fill In Blank
Maximum Score: 2
Correct Answer: 2
Question: How many times does the graph of the function below touch or cross the *x*-axis?
$2x^2 - 7x + 5$

Attempt	Incorrect Feedback
1st	

	Correct Feedback

	Global Incorrect Feedback
	The correct answer is: Two.
