Take Test: Solving Quadratic Graphs and Maximum and Minimum Quiz

Description	
Instructions	
Multiple Attempts	Not allowed. This Test can only be taken once.
Force Completion	This Test can be saved and resumed later.

Save All Answers | Save and Submit

Question 1

3 points | Save Answer

Which of these tables could represent a quadratic function?

x	*y*
2	4
2	2
2	0
2	−2
2	−5

x	*y*
2	4
2	2
2	0
2	2
2	5

x	y
-6	4
-5	-4
0	-4
4	-4
5	-4

x	y
3	16
0	7
7	0
-1	0
6	7

Question 2

3 points Save Answer

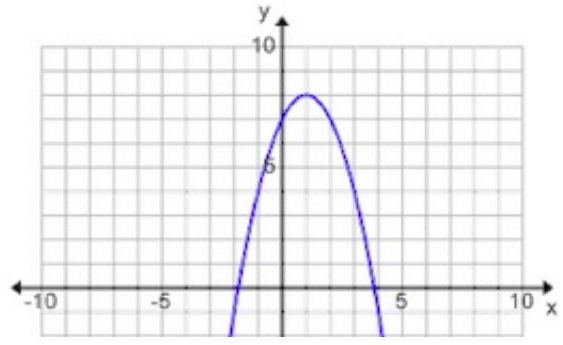
Which equation has a wider graph than $y = \frac{1}{5}x^2$?

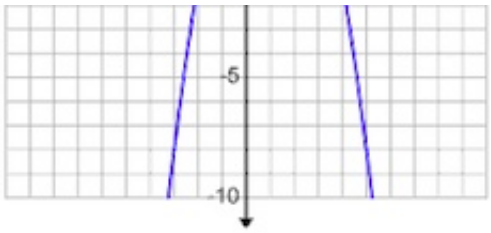
- $y = \frac{1}{3}x^2$
- $y = 5x^2$
- $y = \frac{1}{7}x^2$
- $y = 2x^2$

Question 3

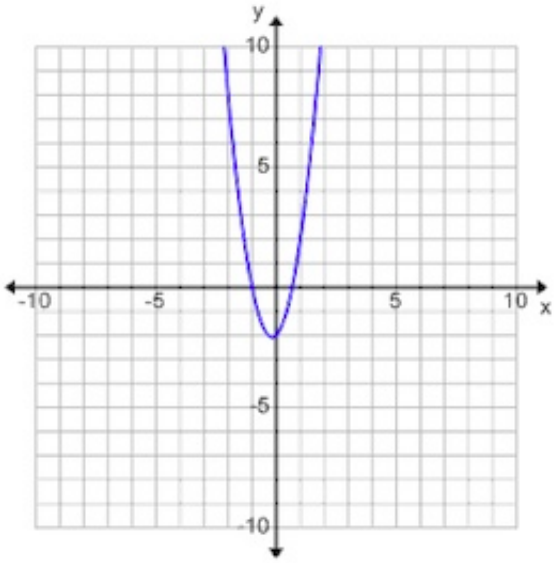
4 points Save Answer

In the equation $y = ax^2 + bx + c$, if a is negative which of the following could be the graph? Select all that apply.

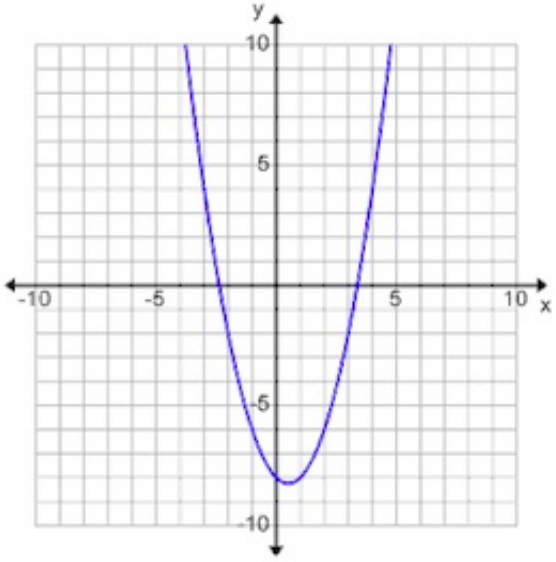



-5
-10

☐


y
10
5
-10
-5
5
10
x
-5
-10

☐


y
10
5
-10
-5
5
10
x
-5
-10

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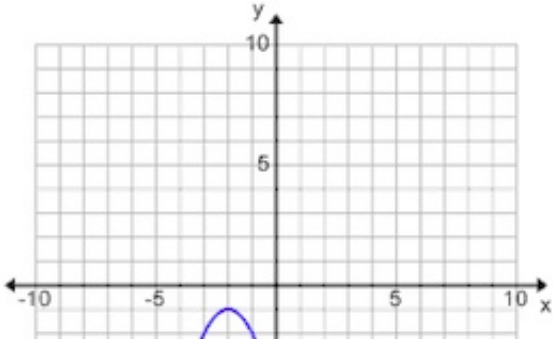
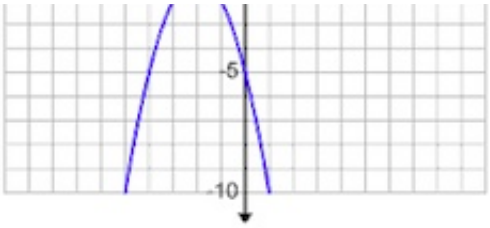
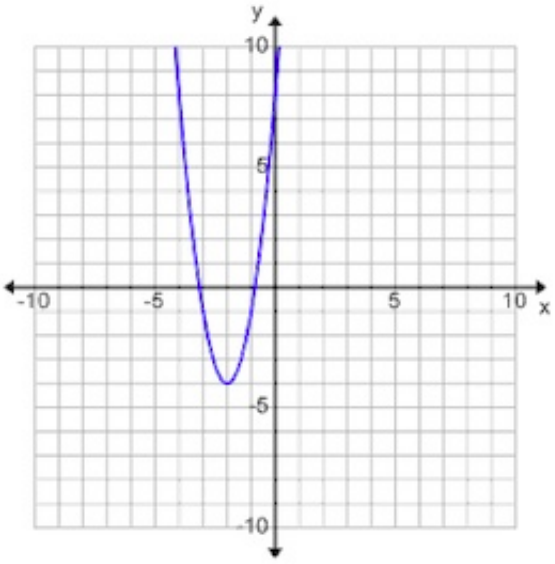

y
10
5
-10
-5
5
10
x



Question 4

3 points Save Answer

What are the roots of the graph?

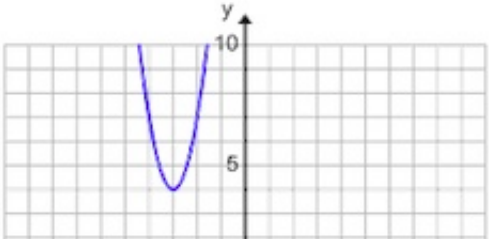


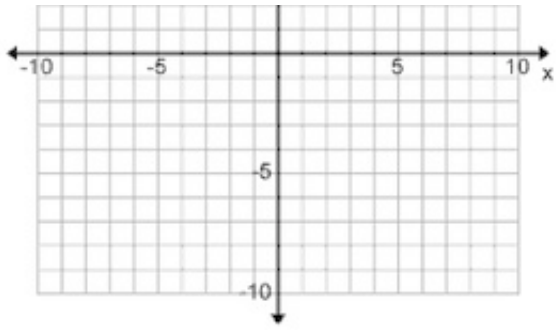
- There are no roots.
- 0 and -2
- -3 and 0
- -1 and -3

Question 5

3 points Save Answer

What are the vertex and roots of the quadratic function graphed below?





- The vertex is (0, 0), and roots are -4 and 4.
- The vertex is (-4, 4), and there are no real roots.
- The vertex is (0, 0), and there are no real roots.
- The vertex is (-4, 4), and the roots are 0 and 4.

Question 6

4 points Save Answer

Which options show the correct steps for finding the x-coordinate of the vertex in the equation, $y = 3x^2 - 6x + 4$. Select all that apply.

- [ ] Establish that a = 3, b = -6
- [ ] $\frac{(-6)}{2(3)}$
- [ ] $\frac{6}{6}$
- [ ] 2

Question 7

3 points Save Answer

Select the correct first step for finding the y-coordinate of the vertex of the equation $y = -2x^2 + 6x - 2$, given that the x-coordinate of the vertex is $\frac{3}{2}$.

- $-2\left(\frac{3}{2}\right)^2 + 6\left(\frac{3}{2}\right) - 2$
- $\frac{12}{4} - 2$
- $-\frac{1}{3}$
- $-\left(\frac{12}{4}\right) + \left(\frac{18}{2}\right) - 2$

3 points Save Answer

Question 8

3 points Save Answer

What is the vertex of the equation, $y = -3x^2 + 2x - 7$?

- $\left(\frac{1}{3}, -\frac{20}{3}\right)$
- $\left(-\frac{1}{3}, -\frac{20}{3}\right)$
- $\left(-\frac{1}{3}, -\frac{19}{3}\right)$
- $\left(\frac{1}{3}, -\frac{19}{3}\right)$

Question 9

3 points Save Answer

A picture frame is made with 40 inches of material. Which expression can be used to calculate the area of the frame if the length of the frame is l?

- $A = l(20 - l)$
- $A = l(l - 20)$
- $A = l(40 - l)$
- $A = l(l - 40)$

Question 10

3 points Save Answer

Which table contains the vertex of the graph represented by $y = x^2 - 2x + 7$?

x	y
-2	15
-1	10
1	6
2	7

x	y
-3	33

Question Completion Status:

0	7
3	10

x	y
-2	-15
0	5
2	15
3	18

x	y
-3	22
1	5
4	15
5	22

Save and Submit

Click Save and Submit to save and submit. Click Save All Answers to save all answers.

Save All Answers | Save and Submit