

Algebra 1
8.3 Worksheet #1

Name _____

In 1 - 3, identify the values of a, b, and c in the function.

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

2. $y = x^2 - 3$

3. $y = -4x^2 + x$

In 4 - 6, tell whether the graph opens up or down. Explain.

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

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

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

In 7 and 8, find the coordinates of the vertex.

7. $y = 3x^2$

8. $y = x^2 + 6x + 2$

In 9 - 11, sketch a graph of the following functions. Label the vertex.

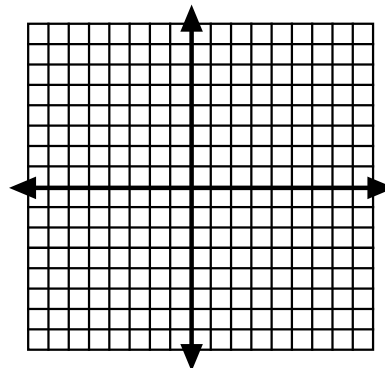
9. $y = x^2 + 6x + 5$

a. Identify the values of a, b, and c in the function.

b. Find the x-coordinate of the vertex.

c. Make a table of values.

d. Graph the function.



e. Describe the domain and range in set notation.

f. AOS = _____

g. max or min value: _____

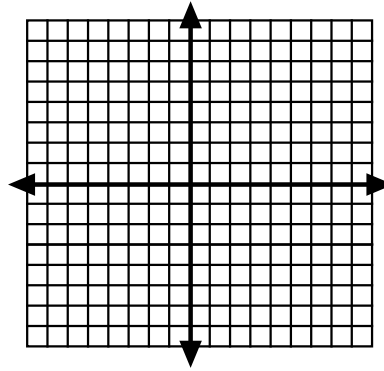
10. $y = -x^2 - 2x + 1$

a. Identify the values of a, b, and c in the function.

b. Find the x-coordinate of the vertex.

c. Make a table of values.

d. Graph the function.



e. Describe the domain and range in set notation.

f. AOS = _____

g. max or min value: _____

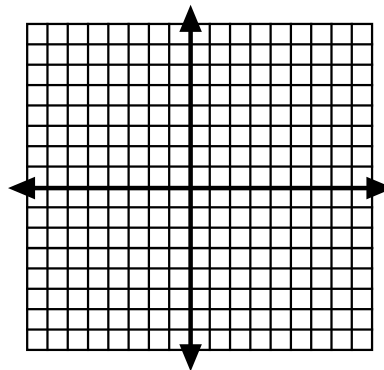
11. $y = 2x^2 + 8x + 5$

a. Identify the values of a, b, and c in the function.

b. Find the x-coordinate of the vertex.

c. Make a table of values.

d. Graph the function.



e. Describe the domain and range in set notation.

f. AOS = _____

g. max or min value: _____