Algebra 2

Name_____

Assignment

Date_____ Period_____

1) What is standard form?

2) What is vertex form?

3) How do you find the vertex when the equation is in standard form?

4) How do you find the vertex when the equation is in vertex form?

5) What is a parabola?

6) What is the axis of symmetry?

7) How would you find the y intercept?

8) How would you find points to graph your equations?

9) Which equations are quadratics?

A) $y = x + 1$

B) $y = x(3x - 1)$

C) $y = x^2 - 92x$

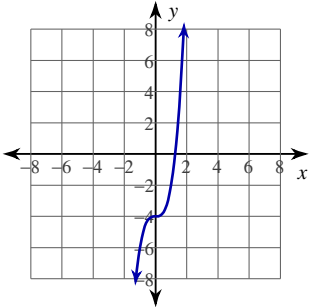D) $y = 3x^4 - 5x^2 + 3x - 3x^4$

10) Which equations are quadratics?

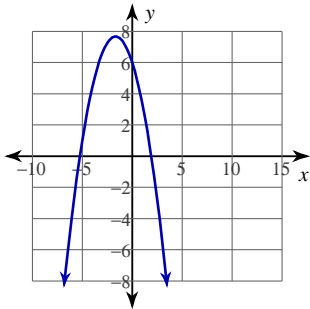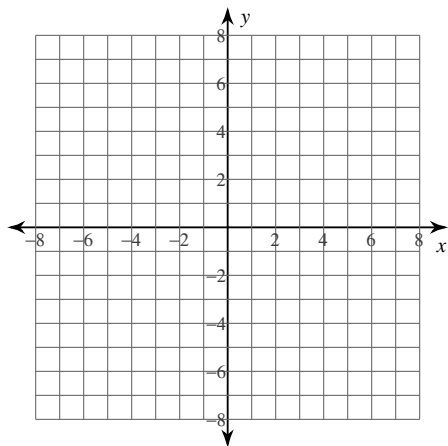A) The dot next to the choice indicates that it is the answer.
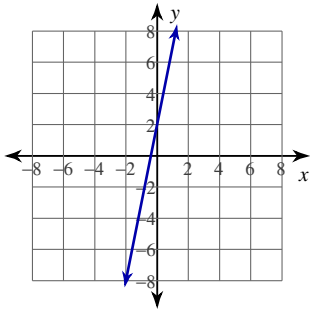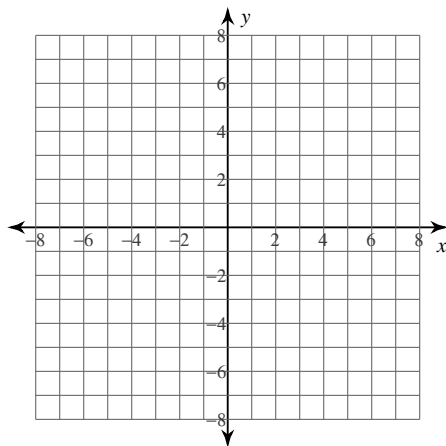

B)
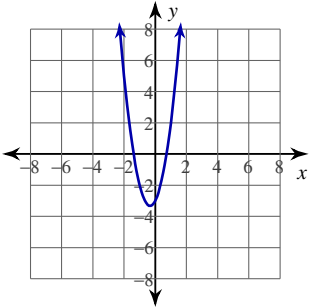
C)

D)

Identify the vertex, axis of symmetry, direction of opening, and min/max value of each. Then sketch the graph.
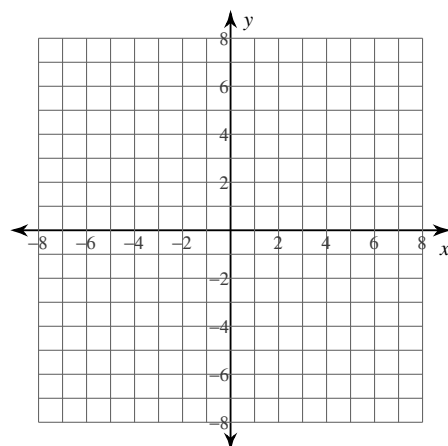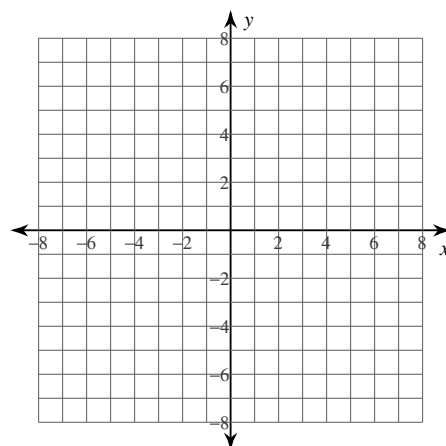
11) $y = -2x^2 + 4x - 5$

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

13) $y = -(x - 5)^2 + 4$

14) $y = -(x - 6)^2 - 3$

What is the transformations?

15) $y = -\dfrac{1}{2}(x - 2)^2 + 2$

16) $y = 2(x - 1)^2 - 4$

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

18) $y = -2(x-3)^2 - 2$

19) $y = -\dfrac{1}{2}(x+4)^2 + 4$

20) $y = -\dfrac{1}{2}(x-4)^2 - 3$

What is the domain and range

21) $y = -x^2 - 4x - 2$

22) $y = 3x^2 + 6x + 4$

23) $y = -2x^2 - 12x - 21$

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

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

26) $y = 2(x-3)^2 - 2$