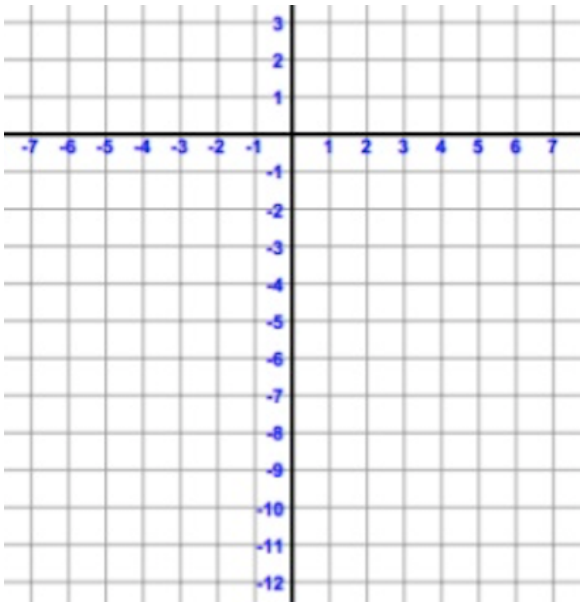
Name_____ Pd_____ Date_____ **2Q Quiz Study Guide**
Turn in this Study Guide on the day of your quiz to receive +5 EXTRA CREDIT on the quiz.

Directions #1 - 2: Graph the quadratic function. Write the equation of AOS. Describe any transformations.

1) $f(x) = -\frac{1}{3}x^2 + 2$ (2Q2)

x		y	$f(x) = y$	(x, y)

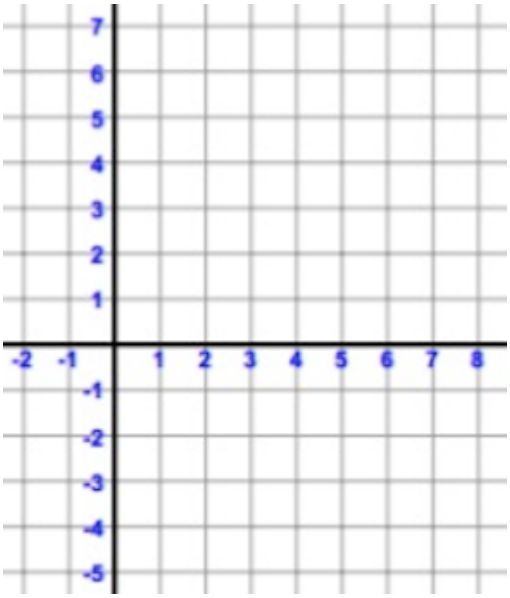


AOS:

Transformations:

2) $f(x) = 2(x-4)^2 - 3$ (2Q3)

x		y	$f(x) = y$	(x, y)



AOS:

Transformations:

Directions #3 - 6: Describe the transformations. (2Q2)

3) Ciara graphs $y = 4x^2 - 2$. Sammy graphs $y = 4x^2 + 3$.

Sammy's graph is _____ compared to Ciara's.

4) Qyara graphs $y = x^2 - 1$. Quanisha draws the same graph 3 units lower than Qyara did. What is the equation for Quanisha's graph?

5) How does the graph of $f(x) = (x+2)^2$ compare to the graph of the parent function, $f(x) = x^2$?

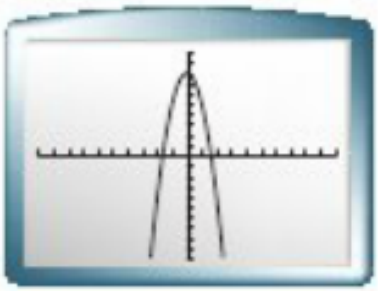
6) Graph A is $y = (x-1)^2$ and Graph B is $y = (x+5)^2$. What is the shift from Graph A to Graph B?

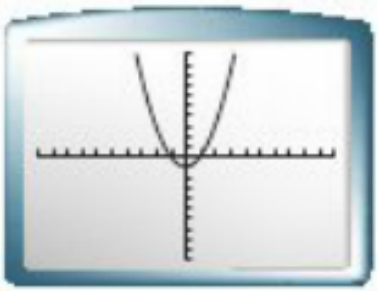
Directions #7: Order the functions from widest to narrowest. Is the vertex a max or a min? (2Q1)

7) $f(x) = 6x^2$ $f(x) = \frac{1}{6}x^2$ $f(x) = -x^2$

Directions #34 - 36: Match each function with its graph. (2Q1)

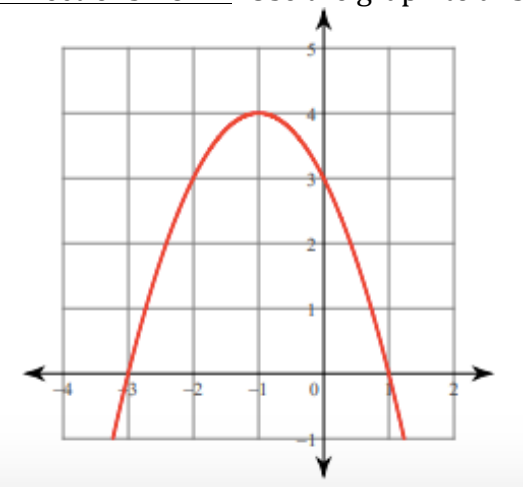
34. $f(x) = x^2 - 1$ **35.** $f(x) = -3x^2 + 8$ **36.** $f(x) = -0.2x^2 + 5$

A. 

B. 

C. 

Directions #8-12: Use the graph to answer the questions. (2Q4)



8) What is the vertex (ordered pair)?

9) What is the equation of the axis of symmetry?

10) What is y-intercept (ordered pair)?

11) What is/are the x-intercept(s) (ordered pair(s))?

12) What is the vertex form of the quadratic function for the graph? (Assume normal width.)