

Day 6 – Graphing in Standard Form

Name: _____

Practice Assignment

Date: _____ Block: _____

Convert the following equations from vertex to standard form and find the y-intercept:

a. $y = (x - 2)^2 - 8$

b. $y = 2(x + 7)^2 + 1$

Find the vertex of the following:

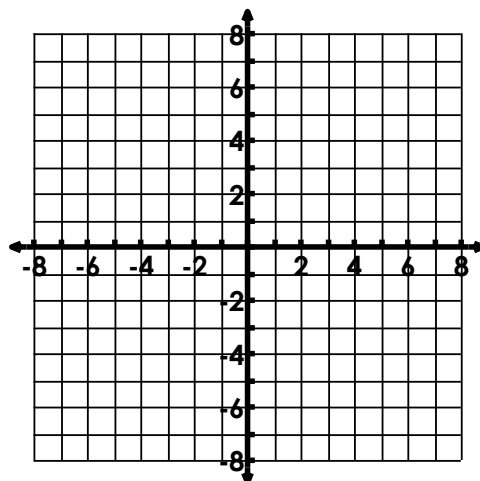
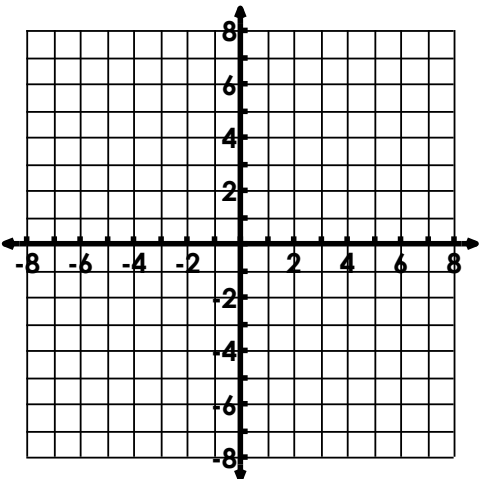
c. $y = 3x^2 - 18x + 17$

d. $y = -x^2 + 8x - 10$

Graph the following quadratic functions. You must show how you calculated the vertex.

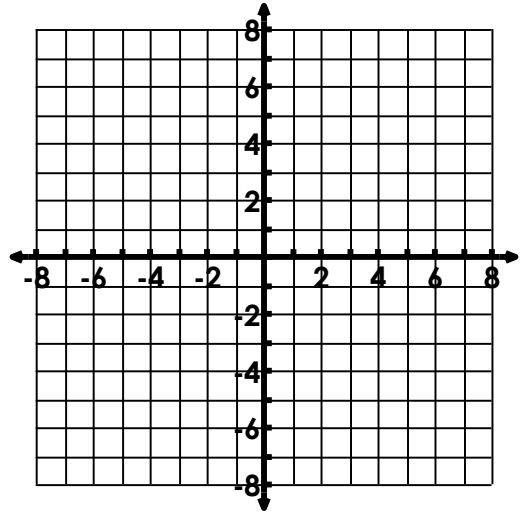
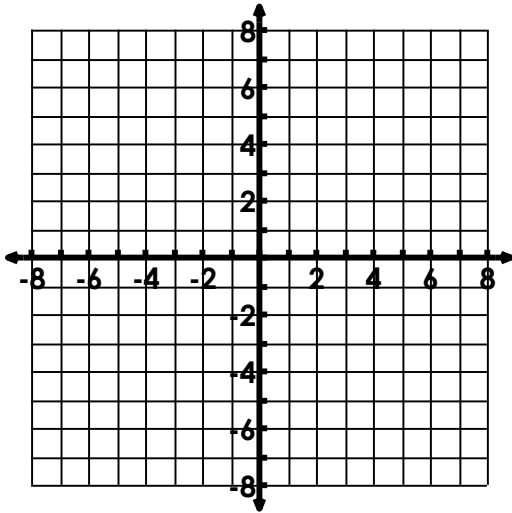
1. $y = x^2 + 6x + 6$

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



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

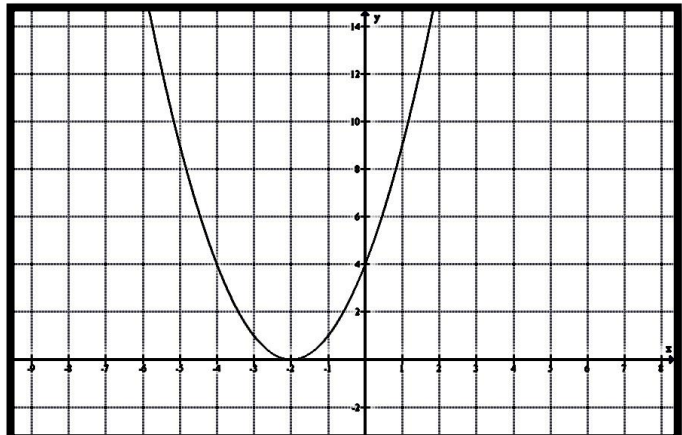
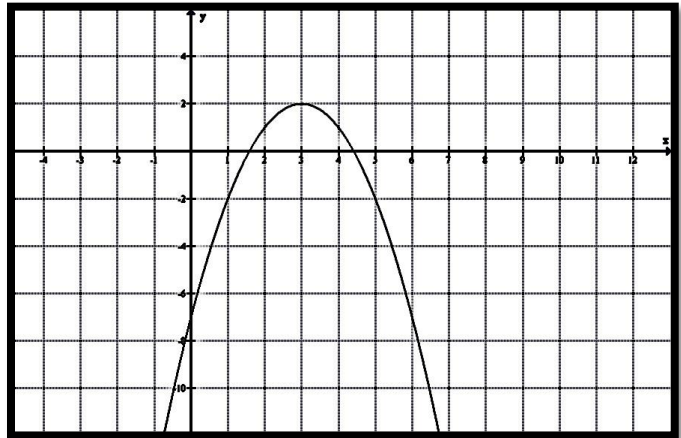
4. $f(x) = -2x^2 - 4x + 1$



Match the graph of a quadratic to an equation (there will be two answers per graph):

Equations:

- a. $y = (x + 2)^2$
- b. $y = (x + 3)^2 + 2$
- c. $y = -x^2 + 6x - 7$
- d. $y = (x + 2)^2 + 1$
- e. $y = x^2 + 4x + 4$
- f. $y = -(x - 3)^2 + 2$



Answer (top graph)

Answer (bottom graph)
