Day 5 – Graphing in Vertex Form
Practice Assignment

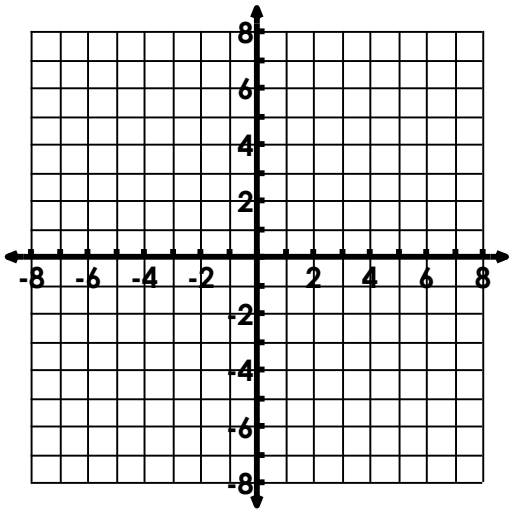
Name: _____
Date: _____ **Block:** _____

Find the vertex of the following equations:

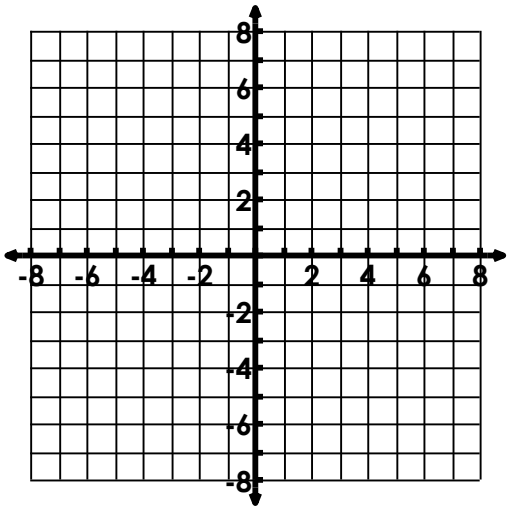
a. $y = 2(x - 28)^2 + 72$ b. $y = (x + 500)^2 - 250$ c. $y = -(x + 22)^2 + 22$

Graph the following quadratic functions:

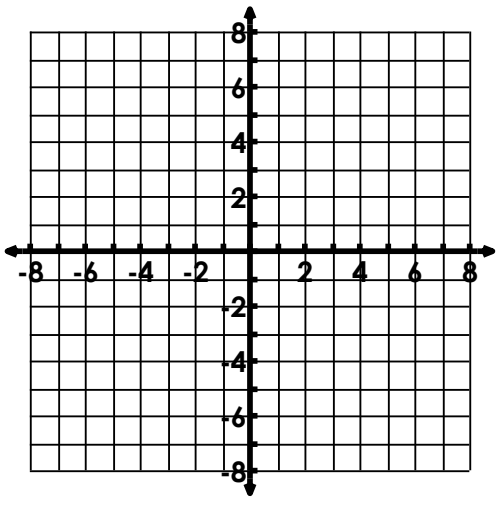
1. $y = (x - 1)^2 + 1$



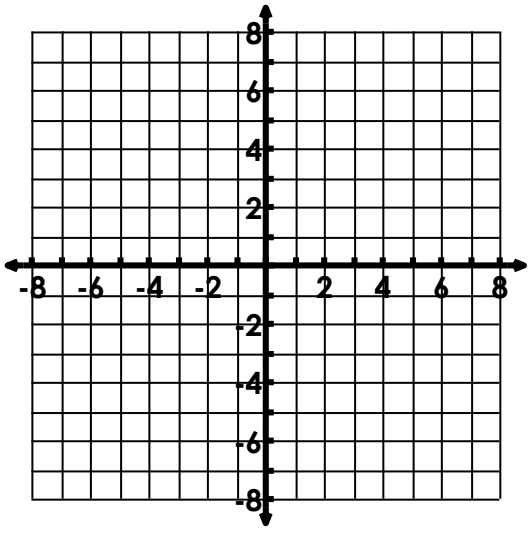
2. $y = (x + 3)^2 + 3$



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



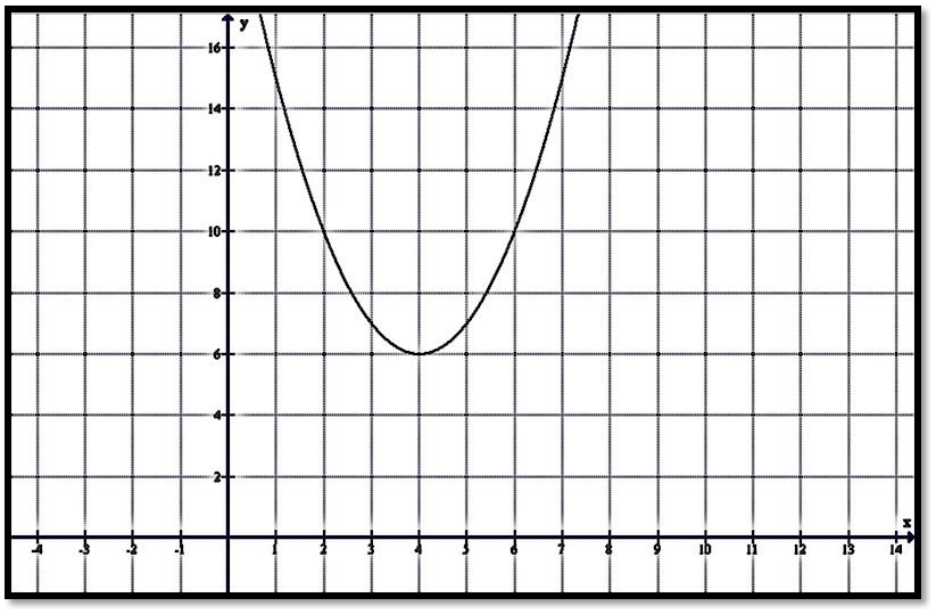
4. $y = -(x + 6)^2$



Match the graph of a quadratic to an equation:

Answer: _____

Equations:
a. $y = -(x + 4)^2 + 6$
b. $y = (x - 4)^2 + 6$
c. $y = 2(x - 4)^2 - 6$
d. $y = (x + 4)^2 + 6$



Review: Factor the following expressions completely.

a. $2x^2 + 16x$

b. $x^2 - 12x + 36$

c. $x^2 - 7x + 6$

d. $5x^2 - 10x - 15$

e. $x^2 + x - 2$

f. $7x^2 - 17x + 10$

g. $3x^2 + 16x + 20$

h. $3x^2 + x - 4$

i. $5x^2 - 12x + 4$