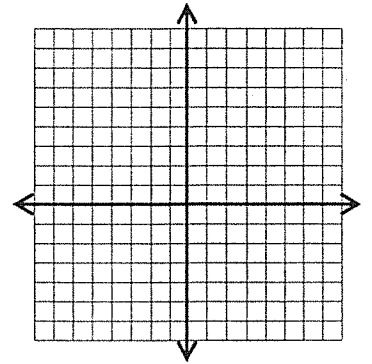
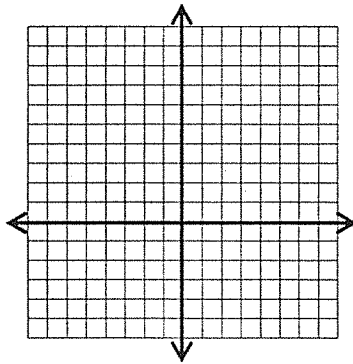


Vertex Form

Turn each equation into vertex form (by completing the square). Then graph.

a. $y = x^2 - 8x + 12$

b. $y = x^2 + 4x + 1$

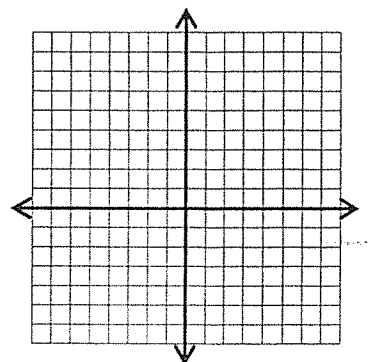
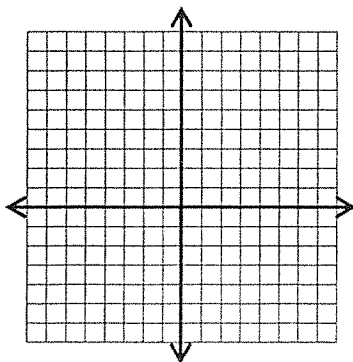


Also: What are the x-intercepts?
What is the y-intercept?

Also: What are the x-intercepts?
(you will need a calculator!)

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

d. $y = x^2 - 3x + 5$ (fractions!)



Also: What does the quadratic formula tell you?

Also: Put five points on this graph

Puzzling Quadratics

For the graphs below, some of the information about the quadratic graph is *missing*. Find the missing information, determine the equation, and then graph the quadratic equation showing **at least 5 points**.

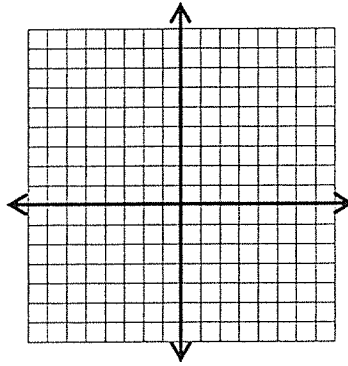
1. $y =$ _____

zeros (2,0) (-2,0)

vertex _____

y-intercept = (0, -4)

axis of symm _____



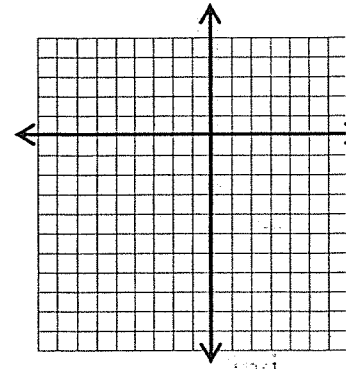
2. $y = x^2 + 2x +$ _____

zeros _____

vertex _____

y-intercept = (0, -8)

axis of symm _____



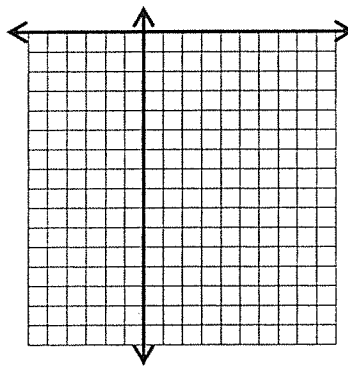
3. $y =$ _____

zeros (0,0) _____

vertex (4, -16)

y-intercept = _____

axis of symm _____



4. $y =$ _____

zeros (-1,0) _____

vertex _____

y-intercept = (0, 3)

axis of symm $x = 1$

