

Questions on 2.8 HW? 2.7  
HW is due today and we are  
quizzing.

11.  $y = 4(x - 2)(x + 6)$   
 a. Vertex:  $(-2, -64)$   
 b. x-inter(s)  $(2, 0); (-6, 0)$   
 c. y-inter  $(0, 48)$   
 d. Stretch  $4$

12.  $y = -3(x + \dots)$   
 a. Vertex:             
 b. x-inter(s)             
 c. y-inter:             
 d. Stretch           

$\frac{2+(-6)}{2} = -2$   
 $\frac{-4}{2} = -2$

$x=0,$

①  $0 = 4(x-2)(x+6)$   
 if  $x=2,$   
 $4(2-2)(2+6)$   
 $4(0)8$   
 $0 \quad (2,0)$

$y = 4(0-2)(0+6)$   
 $y = 4(-2)(6)$   
 $y = -48$

if  $x=-2$   
 $y = 4(-2-2)(-2+6)$   
 $y = 4(-4)(4)$   
 $y = -64$

if  $x=-6$   
 $4(-6-2)(-6+6)$   
 $4(-8)0$   
 $(-6,0)$

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

a. Vertex:  $(-2, -4)$

b. x-inter(s)  $(0, 0); (-4, 0)$

c. y-inter  $(0, 0)$

d. Stretch  $1$

y-intercept,  
make  $x=0$ 

$$y = (0+2)^2 - 4$$

$$y = 4 - 4$$

$$y = 0$$

x-intercept,  
make  $y=0$ 

$$0 = (x+2)^2 - 4$$

$$\sqrt{4} = \sqrt{(x+2)^2}$$

$$\pm 2 = x + 2$$

$$-2 \pm 2 = x$$

$$x = -2 + 2 = 0 \rightarrow (0, 0)$$

$$x = -2 - 2 = -4 \rightarrow (-4, 0)$$

21.  $y = -3$

a. Vertex: \_\_\_\_\_

b. x-inter(s) \_\_\_\_\_

c. y-inter: \_\_\_\_\_

d. Stretch \_\_\_\_\_

## Quadratics Quiz #4: Factoring Quadratics

Factor the following into the factors of  $c$  that add up to  $b$  in  $f(x)=ax^2+bx+c$

$$1) x^2 + 6x + 5 = (x \quad)(x \quad)$$

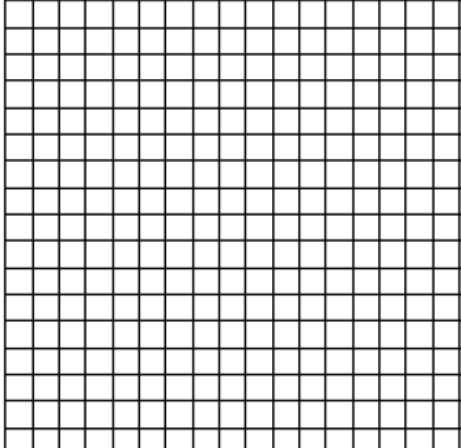
$$2) x^2 + 4x - 12 = (x \quad)(x \quad)$$

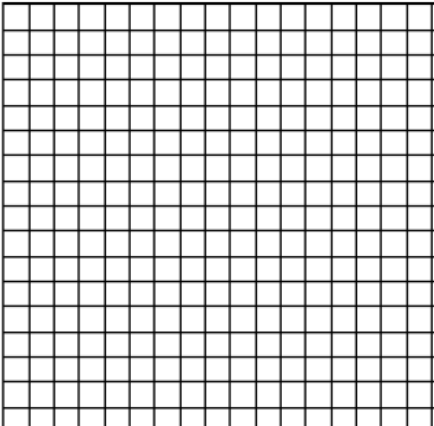
## 2.9 I've Got a Fill-in

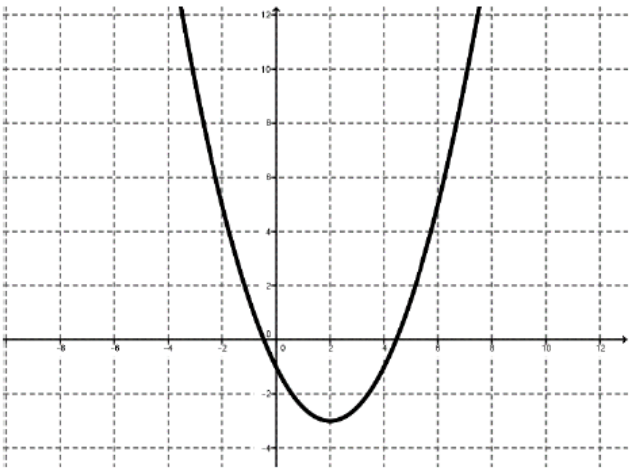
### *A Practice Understanding Task*

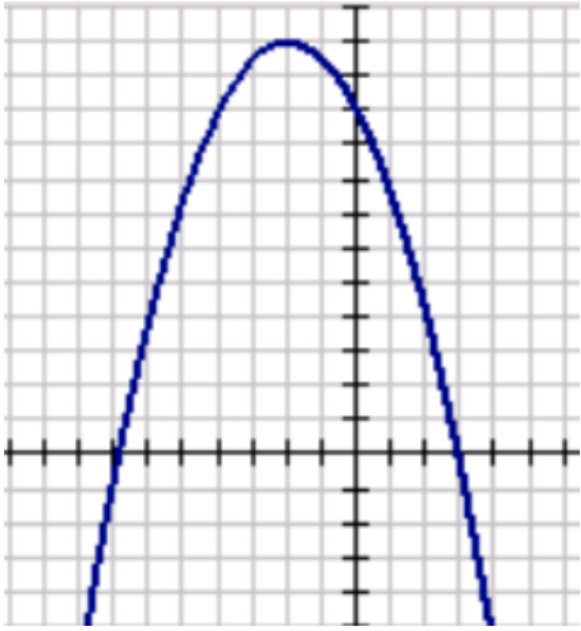
For each problem below, you are given a piece of information that tells you a lot. Use what you know about that information to fill in the rest.



1.	You get this:	Fill in this:
$y = x^2 - x - 12$		Factored form on the equation:
		Graph of the equation: 

2.	You get this:	Fill in this:
$y = x^2 - 6x + 3$		Vertex form of the equation:
		Graph of the equation: 

3. You get this:	Fill in this:
	Vertex form of the equation:
	Standard form of the equation:

4. You get this:	Fill in this:
	<p>Factored form of the equation:  <math>(3, 0) \quad (-7, 0)</math>  <math>-\frac{1}{2}(x - 3)(x + 7)</math></p> <p>Standard form of the equation: <math>+10</math>  <math>ax^2 + bx + c</math>  <math>-\frac{1}{2}(x^2 + \underline{7x} - \underline{3x} - 21)</math>  <math>-\frac{1}{2}(x^2 + 4x - 21)</math>  <math>-\frac{1}{2}x^2 - 4x + 10.5</math> <i>close enough</i></p>

HW: pg 53-56  
 pick 4 from # 1, 2, 3, 5, 6, 7  
 skip HW pg 57-59



5.	You get this:	Fill in this:
$y = -x^2 - 6x + 16$		Either form of the equation other than standard form.
		Vertex of the parabola
		x-intercepts and y-intercept

6. You get this:	Fill in this:
$y = 2x^2 + 12x + 13$	Either form of the equation other than standard form.
	Vertex of the parabola
	x-intercepts and y-intercept

7.	You get this:	Fill in this:
$y = -2x^2 + 14x + 60$		Either form of the equation other than standard form.
		Vertex of the parabola
		x-intercepts and y-intercept

Homework

Finish 2.9 "Ready, Set, Go"