

standard form  $y = ax^2 + bx + c$   
 Intercept (Factored) form  $y = a(x-p)(x-q)$

Name \_\_\_\_\_  
 Period \_\_\_\_\_

Converting Quadratic Equations WS

Write in intercept form

1.  $y = x^2 - 3x + 2$

$y = (x-2)(x-1)$

~~$\begin{matrix} 2 & -1 \\ -2 & -3 \end{matrix}$~~

2.  $y = x^2 - 100$  DOTS

$y = (x+10)(x-10)$

~~$\begin{matrix} -100 & 10 \\ -10 & 0 \end{matrix}$~~

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

$y = (x+6)(x-3)$

~~$\begin{matrix} -18 & -3 \\ 6 & 3 \end{matrix}$~~

4.  $y = x^2 - 2x - 8$

$y = (x-4)(x+2)$

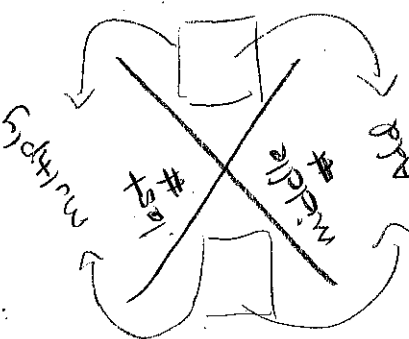
~~$\begin{matrix} -8 & 2 \\ -4 & -2 \end{matrix}$~~

5.  $y = x^2 - x - 132$

$y = (x+11)(x-12)$

~~$\begin{matrix} -132 & -12 \\ 11 & -1 \end{matrix}$~~

- 132  
 1 132  
 2 66  
 3 44  
 4 33  
 6 22  
 11 12



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

$y = (x+2)(x+\frac{1}{4})$

~~$\begin{matrix} 4 & 2 \\ 2 & 4 \end{matrix}$~~

$y = (2x+1)(2x+1)$

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

7.  $y = 4x^2 + 5x - 6$

$y = (x-\frac{3}{4})(x+\frac{8}{4})$

~~$\begin{matrix} -24 & 8 \\ -3 & 5 \end{matrix}$~~

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

8.  $y = 12x^2 + 17x + 6$

$y = (x+\frac{3}{4})(x+\frac{4}{4})$

~~$\begin{matrix} 72 & 9 \\ 8 & 17 \end{matrix}$~~

$y = (3x+2)(4x+3)$

9.  $y = 25x^2 - 9$

$y = (5x+3)(5x-3)$

10.  $y = 15x^2 + 8x - 16$

$y = (x-\frac{4}{3})(x+\frac{20}{3})$

~~$\begin{matrix} -240 & 20 \\ -12 & 8 \end{matrix}$~~

$y = (5x-4)(3x+4)$