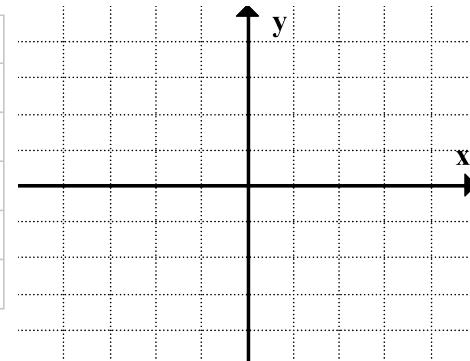


C11 - 4.1 - x-intercepts $x^2 + bx + c$ "a = 1" WS

**Factor the following, set $y = 0$, and set your brackets equal to zero separately and solve.
Then sketch a graph and label the x – intercepts**

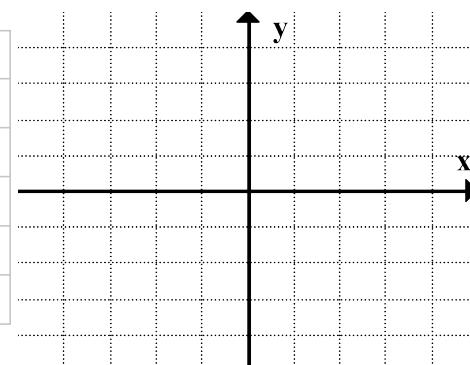
$$y = x^2 + 5x - 6 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \\ \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

x	y



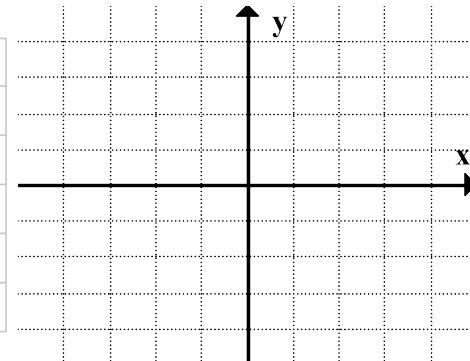
$$y = x^2 + 6x + 8 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \\ \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

x	y



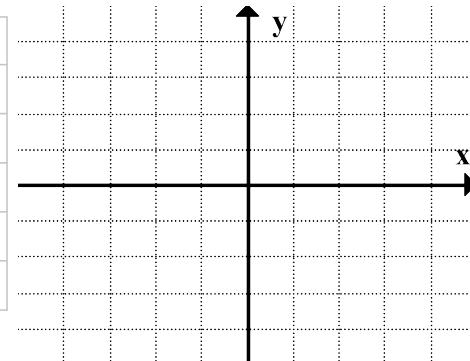
$$y = x^2 + 3x - 4 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \\ \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

x	y



$$y = x^2 - 4x - 5 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \\ \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

x	y

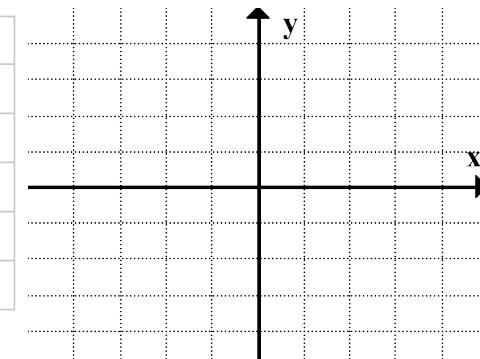


C11 - 4.1 - x-intercepts $x^2 + bx + c$ "a = 1" WS

Factor the following, set $y = 0$, and set your brackets equal to zero separately and solve.
Then sketch a graph and label the x – intercepts

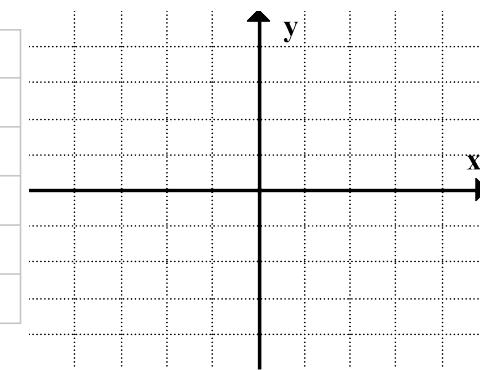
$$y = x^2 + 7x + 12 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \\ \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

x	y



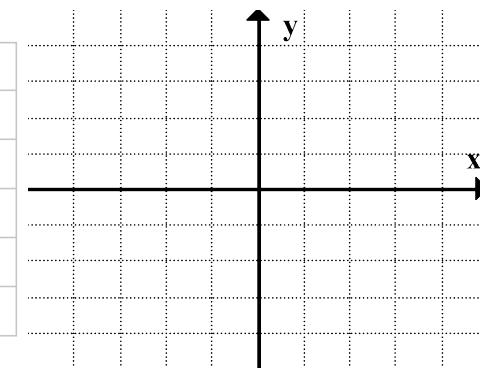
$$y = x^2 + 4x + 3 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \\ \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

x	y



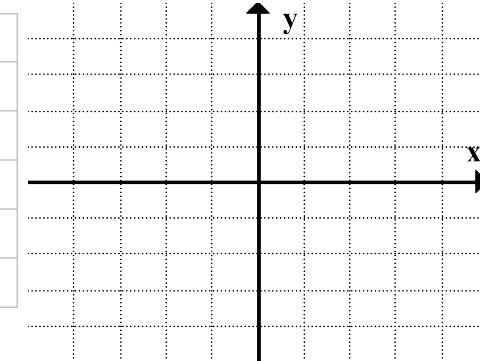
$$y = x^2 - 3x - 4 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \\ \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

x	y



$$y = x^2 + 4x - 5 \quad \underline{\hspace{2cm}} x \underline{\hspace{2cm}} = \\ \underline{\hspace{2cm}} + \underline{\hspace{2cm}} =$$

x	y

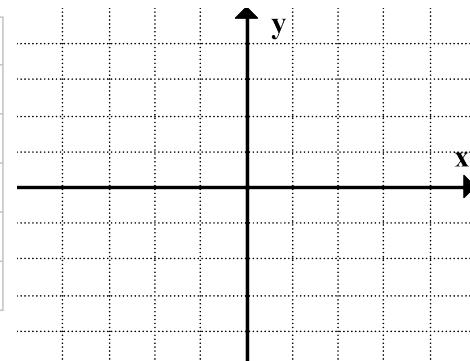


C11 - 4.1 - x-intercepts " $x^2 + bx + c$, $c = 0$ " WS

Factor the following, set $y = 0$, and set your Factors equal to zero seperately and solve.
Then sketch a graph and label the x -intercepts

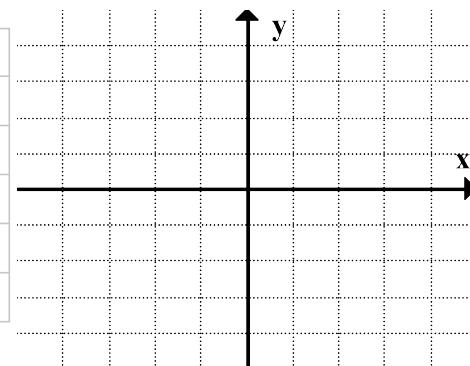
$$y = x^2 + 2x$$

x	y



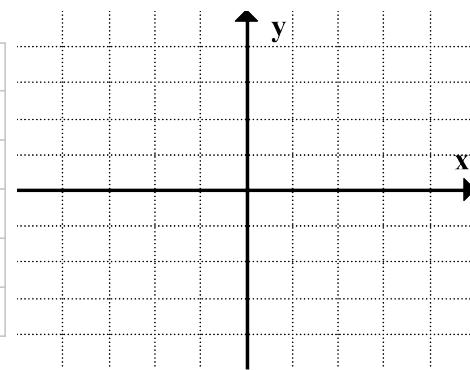
$$y = x^2 - 3x$$

x	y



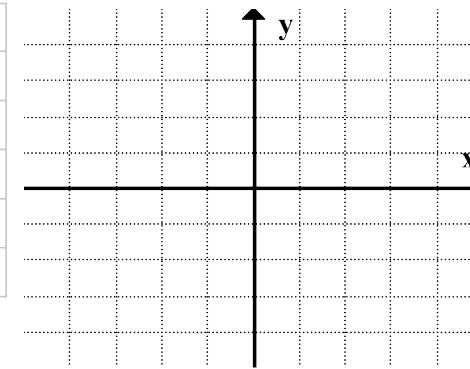
$$y = -x^2 - 5x$$

x	y



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

x	y



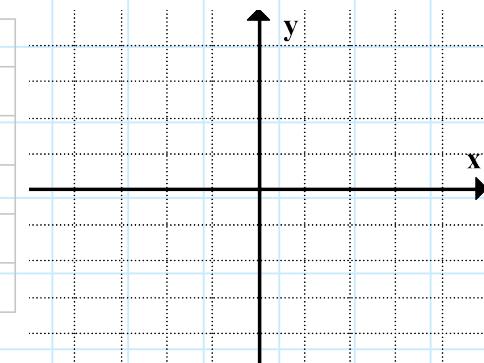
C11 - 4.1 - x-intercepts $ax^2 + bx + c$ "a ≠ 1" WS

Factor the following, set $y = 0$, and set your brackets equal to zero separately and solve.
Then sketch a graph and label the x-intercepts

$$y = 2x^2 + 7x + 6$$

	x	$=$
	$+ \quad$	$=$

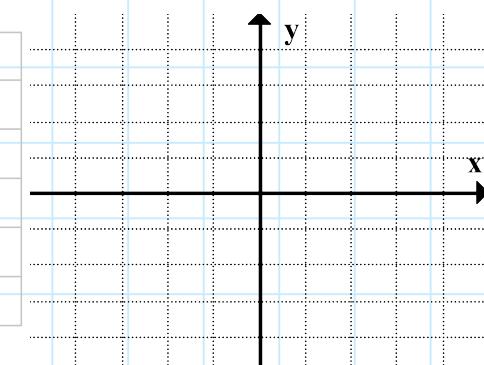
x	y



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

	x	$=$
	$+ \quad$	$=$

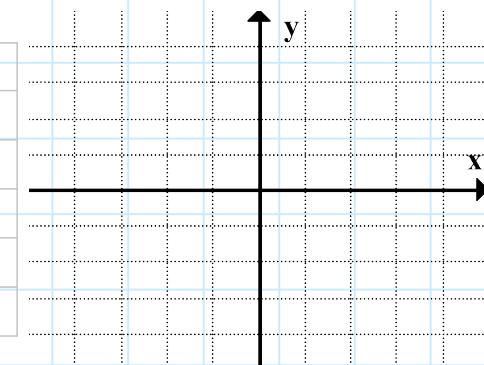
x	y



$$y = 2x^2 + 3x - 9$$

	x	$=$
	$+ \quad$	$=$

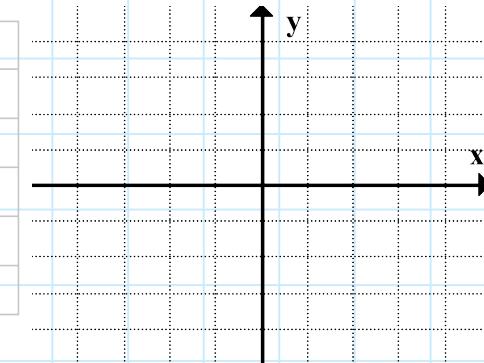
x	y



$$y = 3x^2 - 5x + 2$$

	x	$=$
	$+ \quad$	$=$

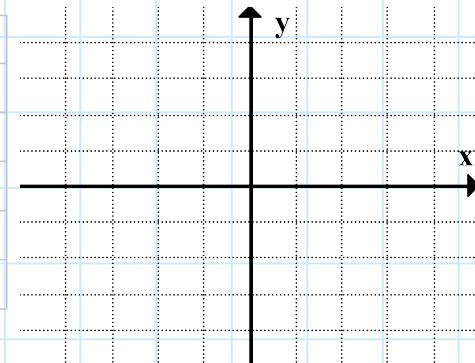
x	y



C11 - 4.1 - x-intercepts x^2 – # WS

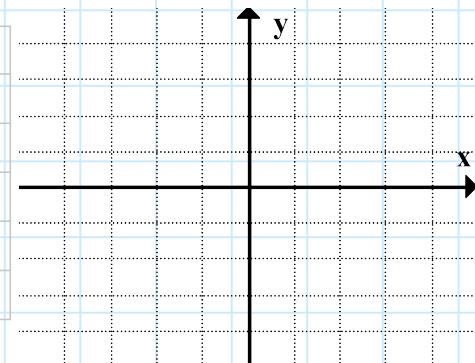
Factor the following, set $y = 0$, and set your brackets equal to zero separately and solve. Then sketch a graph and label the x – intercepts

$$y = x^2 - 1$$

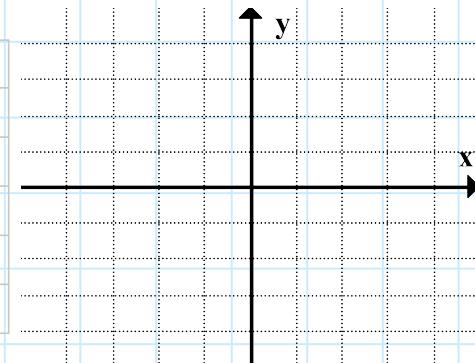


$$y = x^2 - 25$$

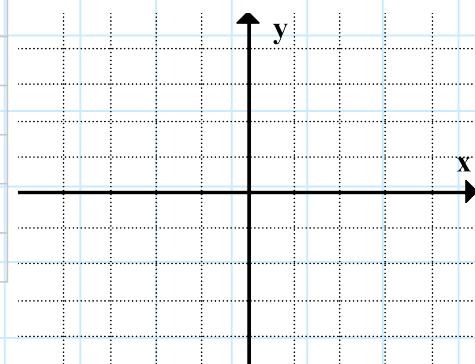
x	y



$$y = 4 - x^2$$



$$y = x^2 + 1$$



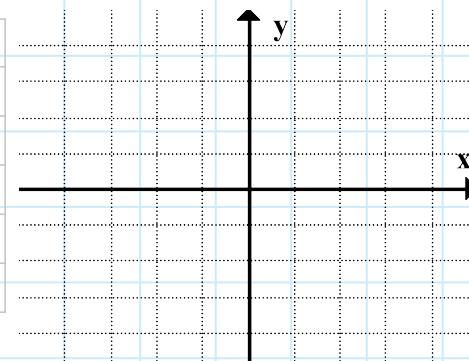
C11 - 4.1 - x-intercepts x^2 – # WS

Factor the following, set $y = 0$, and set your brackets equal to zero separately and solve.

Then sketch a graph and label the x – intercepts

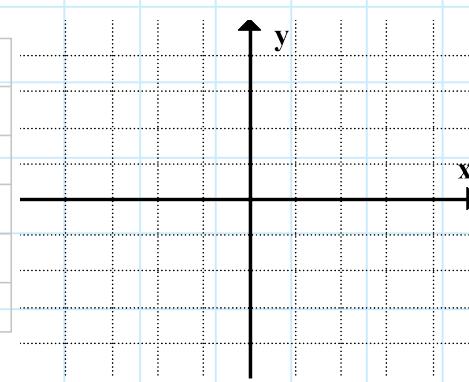
$$y = -x^2 + 9$$

x	y



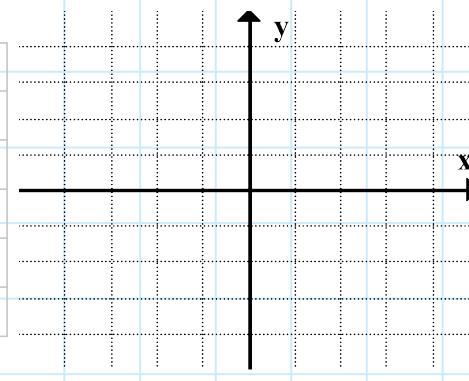
$$y = 9x^2 - 4$$

x	y



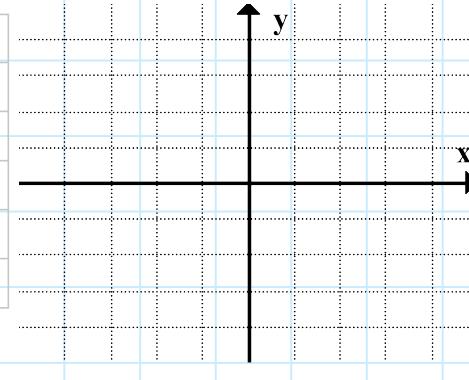
$$y = 9 - 4x^2$$

x	y



$$y = 4x^2 + 4$$

x	y

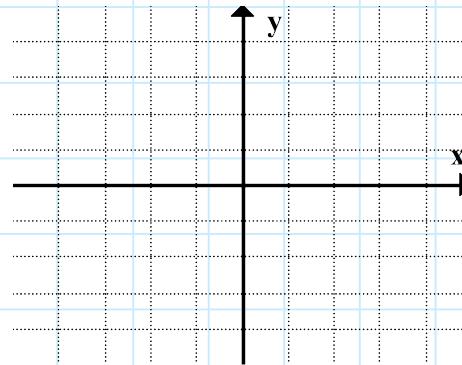


C11 - 4.1 - Graphing Factored Form TOV WS ($a \neq 1$)

Graph the following equations using a table of values.

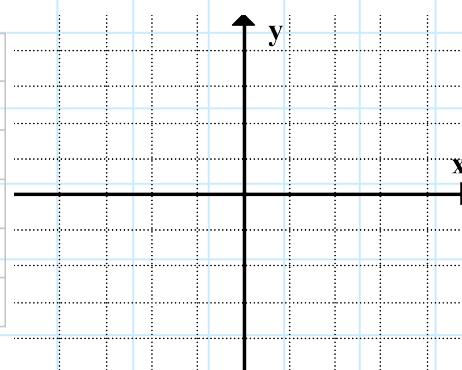
$$y = 2(x - 1)(x - 3)$$

x	y



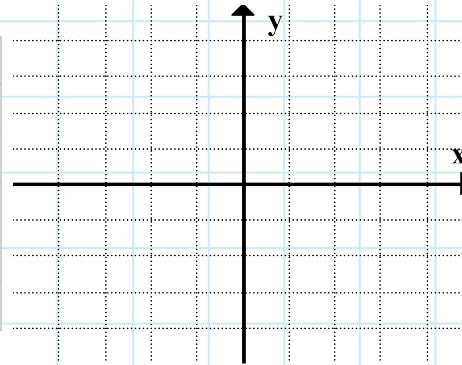
$$y = 3(x + 2)(x + 4)$$

x	y



$$y = -2(x - 1)(x - 5)$$

x	y



$$y = \frac{1}{2}(x + 2)(x + 6)$$

x	y

