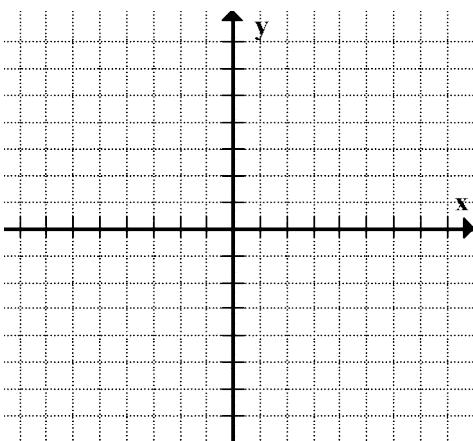


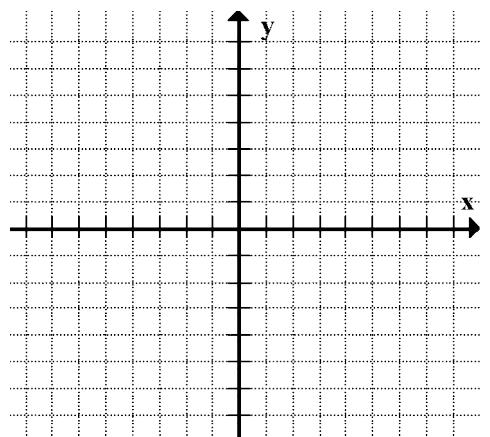
C11 - 3.1 - Graph Stand Form TOV WS ($x^2 + q$)

Graph the following equations using a table of values.

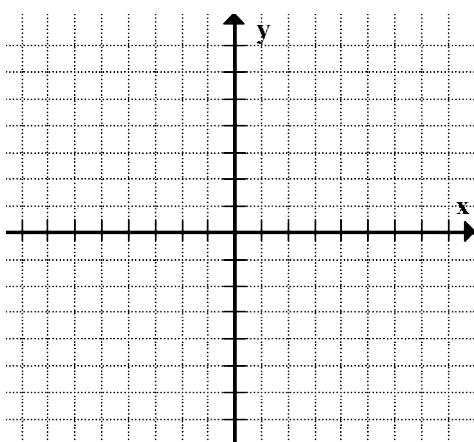
$$y = x^2$$



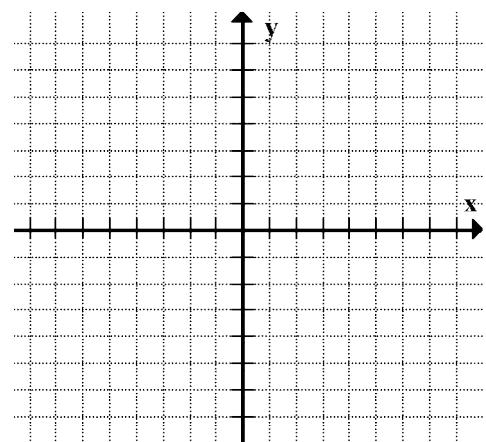
$$y = x^2 - 4$$



$$y = x^2 + 2$$



$$y = x^2 - 1$$



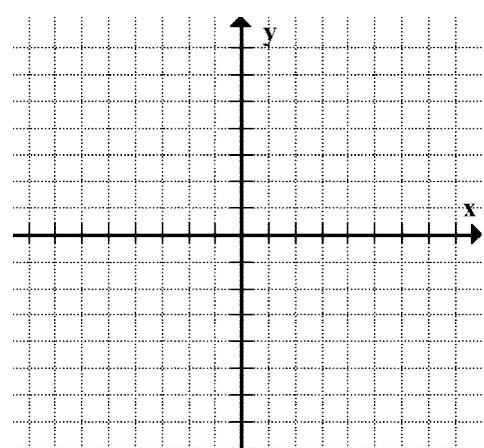
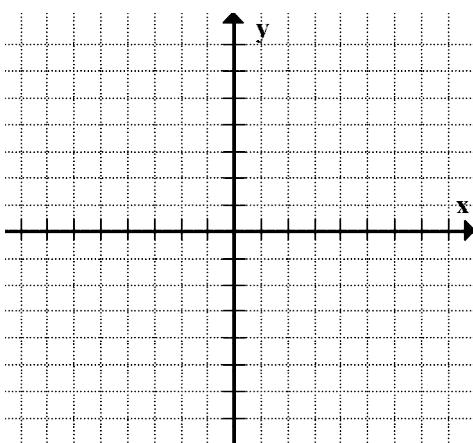
C11 - 3.1 - Graphing Vertex Form TOV WS (a=1)

Graph the following equations using a table of values, on graph paper. Choose increments away from Vertex.

$$y = x^2 \longrightarrow y = 1(x - 0)^2 + 0$$

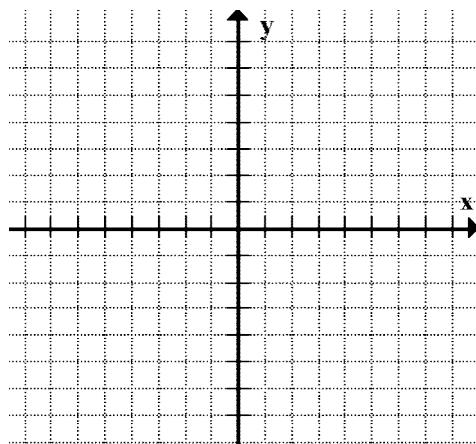
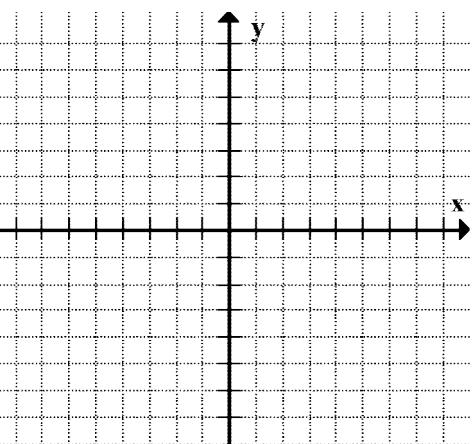
$$y = (x - 1)^2 \longrightarrow y = (x - 1)^2 - 0$$

x	y
0	0



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

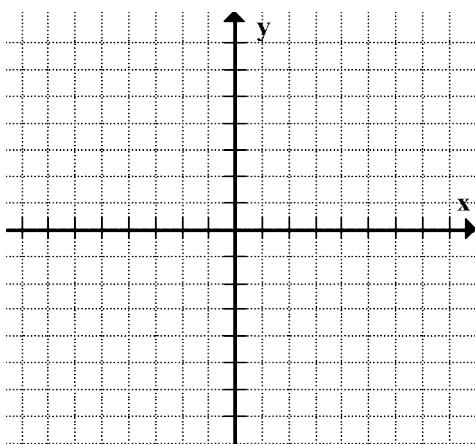
$$y = (x - 3)^2$$



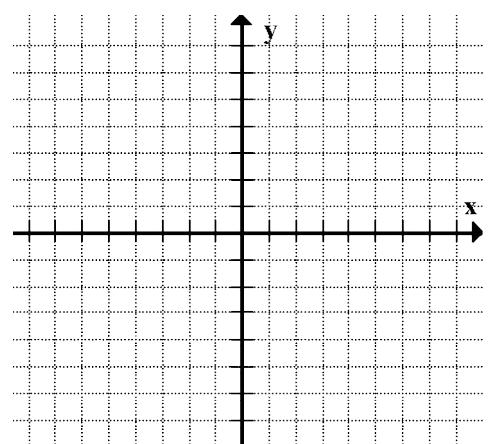
C11 - 3.1 - Graph Stand Form TOV WS ($-ax^2$)

Graph the following equations using a table of values, on graph paper. Choose your own increments.

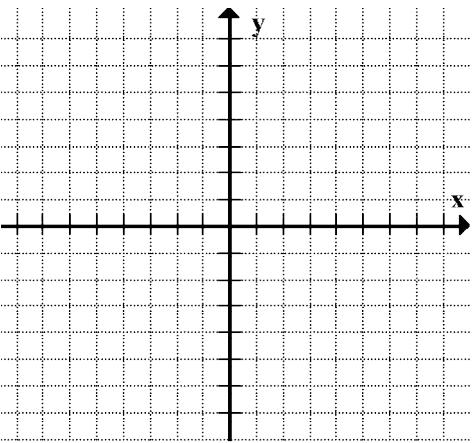
$$y = -x^2$$



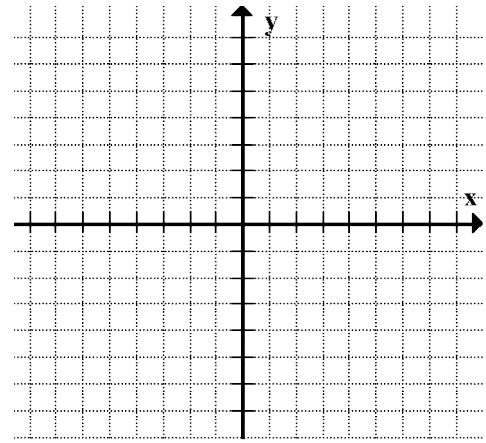
$$y = -x^2 + 4$$



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



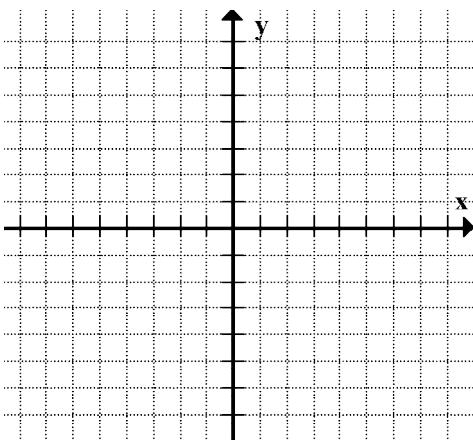
$$y = -2x^2 + 2$$



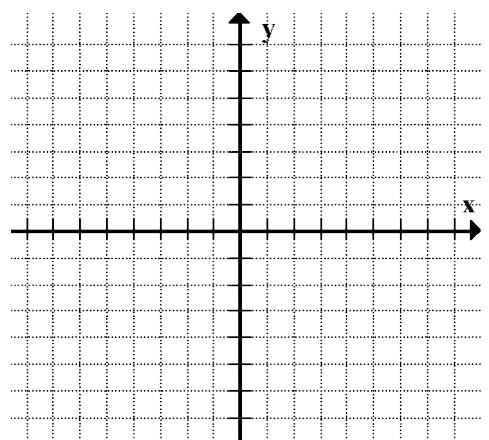
C11 - 3.2 - Graph Stand Form TOV WS (ax^2)

Graph the following equations using a table of values, on graph paper. Choose your own increments.

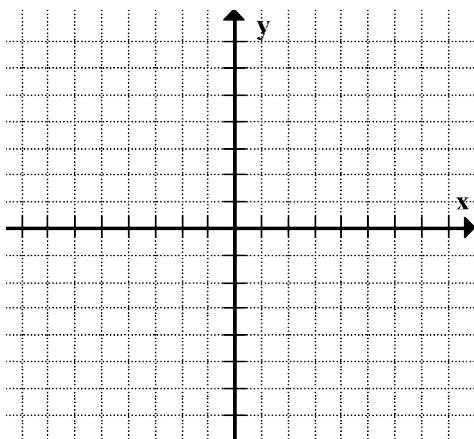
$$y = 2x^2$$



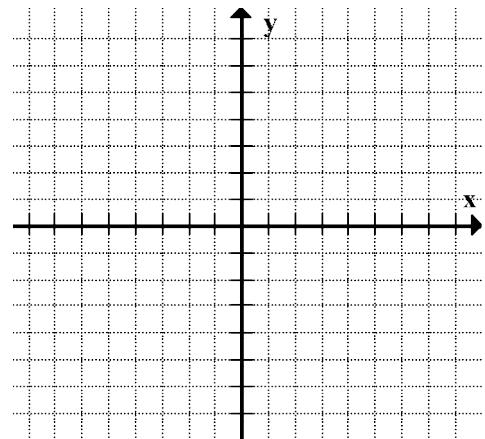
$$y = 2x^2 - 2$$



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



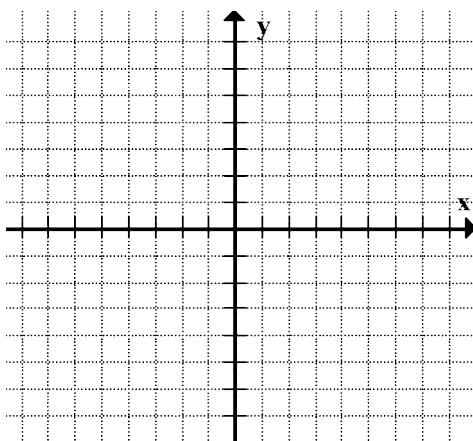
$$y = 3x^2 - 3$$



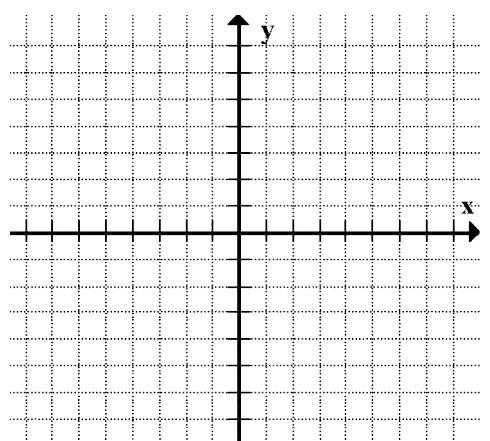
C11 - 3.2 - Graph Stand Form TOV WS (ax^2)

Graph the following equations using a table of values.

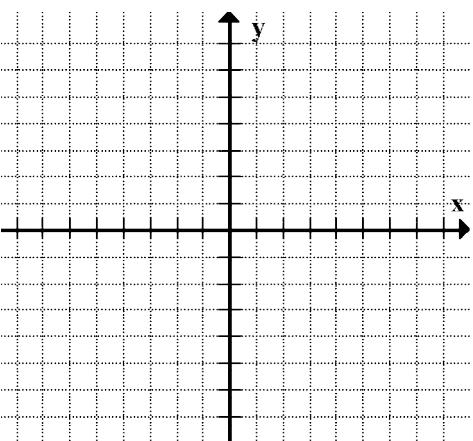
$$y = x^2$$



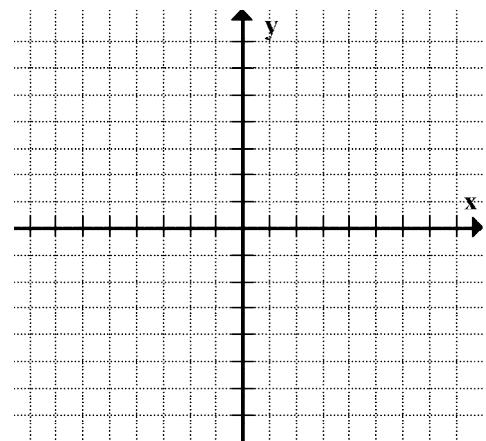
$$y = 2x^2$$



$$y = \frac{1}{2}x^2$$



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

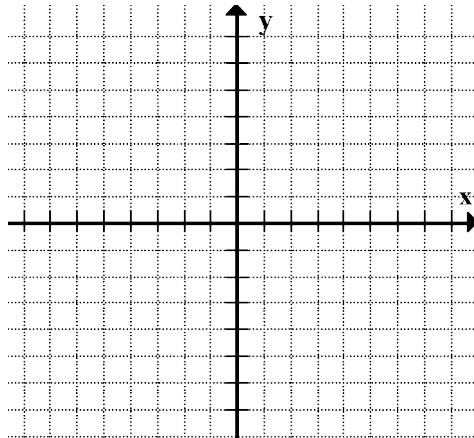


C11 - 3.2 - Graph Stand Form TOV WS ($\frac{1}{2}x^2$)

Graph the following equations using a table of values, on graph paper. Choose your own increments.

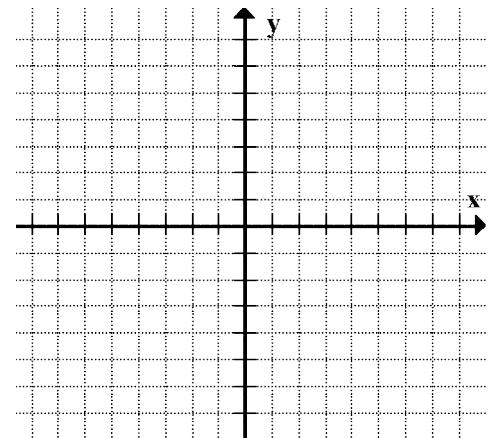
$$y = \frac{1}{2}x^2$$

x	y



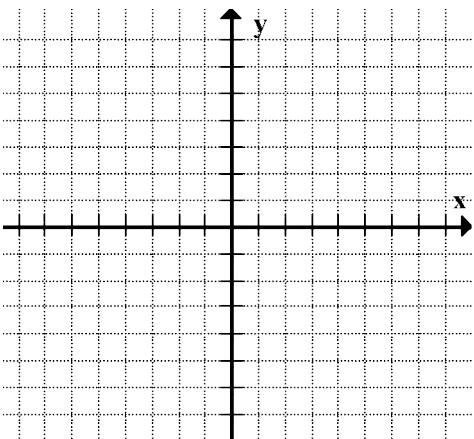
$$y = \frac{1}{2}x^2 - 2$$

x	y



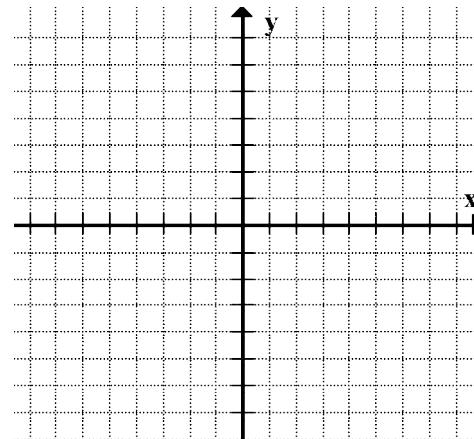
$$y = \frac{1}{2}x^2 - 8$$

x	y



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

x	y



C11 - 3.3 - Foil HW

Multiply Out

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

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

$$y = \left(x + \frac{1}{2}\right)^2$$

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

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

$$y = \left(x + \frac{1}{3}\right)^2 + \frac{1}{2}$$

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

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

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

$$y = -(x - 4)^2 - 1$$

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

$$y = -\frac{1}{2}(x + 2)^2 - 3$$

C11 - 3.3 - Completing the Square/Perfect Square HW

Perfect square: $y = (x - p)^2$

What value of "c" makes the following a perfect square, factor and write as a perfect square.

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

$$y = x^2 - 8x + c$$

Complete the square and write the vertex: (x, y) .

$$y = x^2 + 6x + 5$$

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

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

$$y = x^2 + 8x$$

$$y = 2x^2 - 8x + 9$$

$$y = 2x^2 - 12x + 17$$

$$y = -2x^2 - 6x - 15$$

$$y = 2x^2 - 10x$$

C11 - 3.3 - Completing the Square/Perfect Square HW

Perfect square: $y = (x - p)^2$

What value of "c" makes the following a perfect square, factor and write as a perfect square.

$$y = x^2 + \frac{1}{2}x + c$$

$$y = x^2 - \frac{2}{3}x + c$$

Complete the square and write the vertex: (x, y) .

$$y = x^2 + \frac{1}{2}x + 5$$

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

$$y = x^2 - \frac{3}{2}x + 4$$

$$y = x^2 + \frac{2}{3}x$$

$$y = \frac{1}{2}x^2 - 2x + 9$$

$$y = 2x^2 - \frac{2}{3}x + 17$$

$$y = -2x^2 - \frac{3}{2}x - 15$$

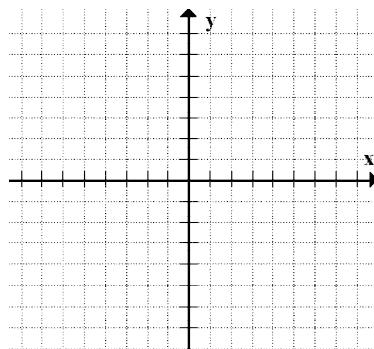
$$y = 2x^2 - .05x$$

C11 - 3.3 - Find Equation in Vertex Form HW

Find equation in Vertex Form and graph.

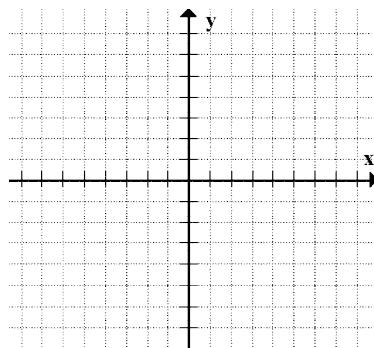
Vertex: $(1, -4)$

Point: $(2, -3)$



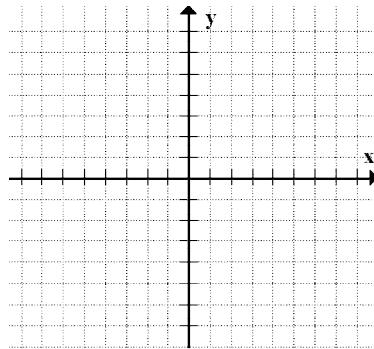
Vertex: $(1, -8)$

Point: $(2, -6)$



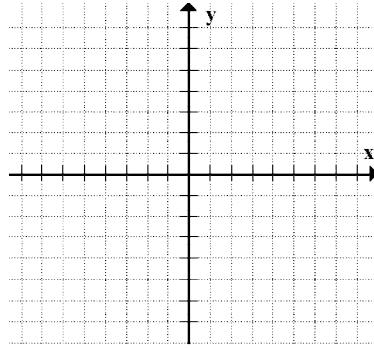
Vertex: $(-1, -1)$

Point: $(-2, 1)$



Vertex: $(2, 1)$

$y - \text{int} = 2$



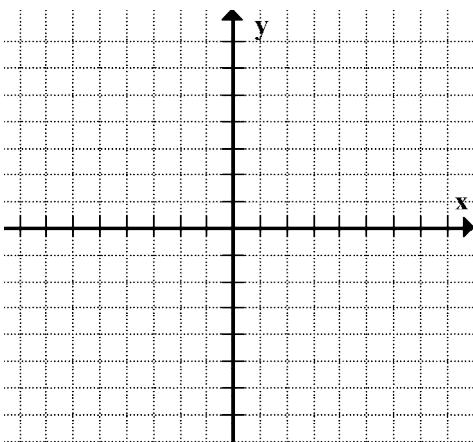
C11 - 3.3 - Graphing Vertex Form TOV WS ($a = -1$)

Graph the following equations using a table of values, on graph paper. Choose your own increments.

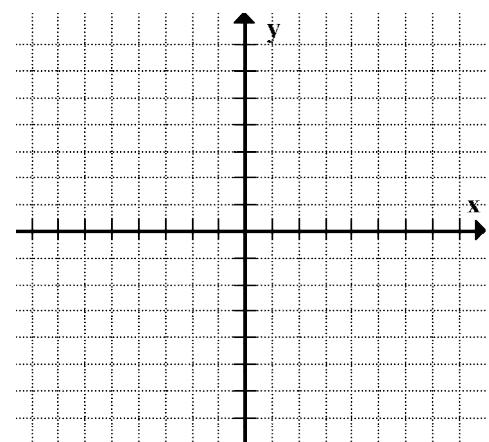
$$y = (x - 2)^2 - 4$$

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

x	y



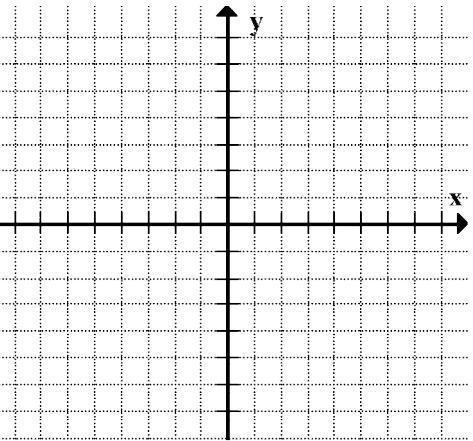
x	y



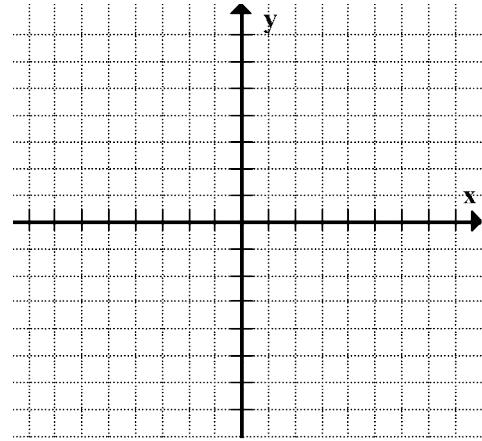
$$y = (x - 2)^2 - 1$$

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

x	y



x	y

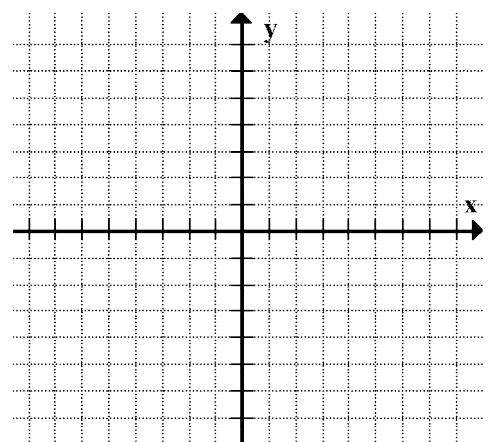
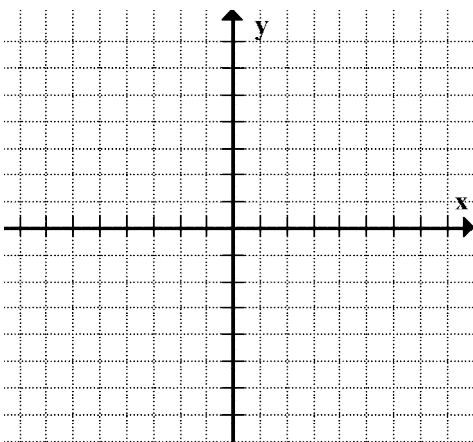


C11 - 3.3 - Graphing Vertex Form TOV WS ($a \neq 1$)

Graph the following equations using a table of values, on graph paper. Choose your own increments.

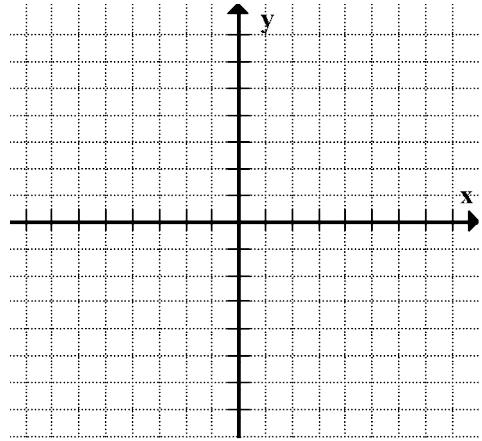
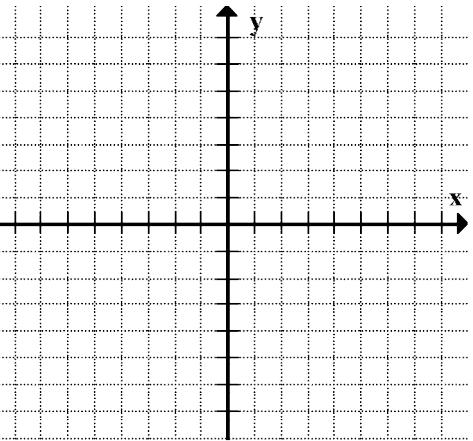
$$y = 2(x + 1)^2 + 1$$

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



$$y = \frac{1}{2}(x - 1)^2 - 2$$

$$y = 3(x + 1)^2 + 2$$



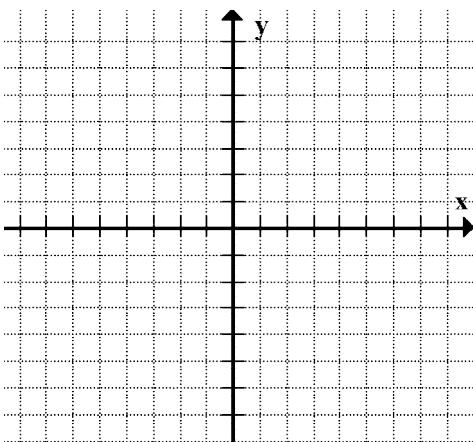
C11 - 3.3 - Graphing Vertex Form TOV WS ($a = -\#$)

Graph the following equations using a table of values, on graph paper. Choose your own increments.

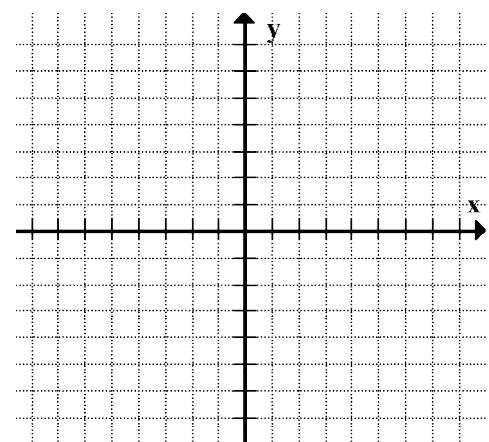
$$y = -(x + 1)^2 + 1$$

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

x	y



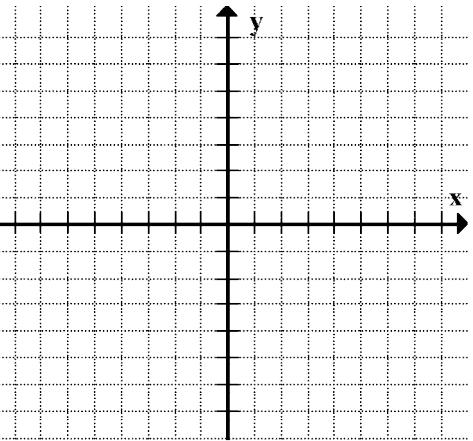
x	y



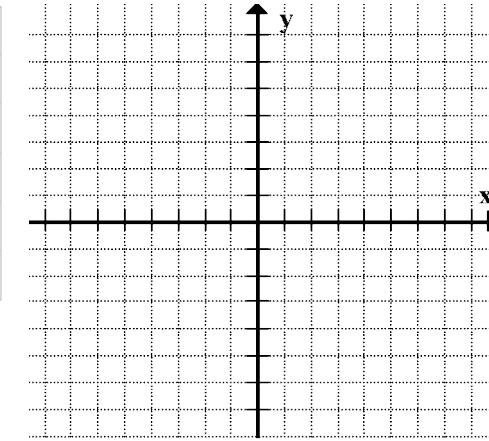
$$y = -\frac{1}{2}(x - 1)^2 + 2$$

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

x	y



x	y



C11 - 3.3 - Vertex: $(-\frac{b}{2a}, y)$ Quadratics in Standard Form WS

Find the Vertex

$$\text{Vertex} = \left(\frac{-b}{2a}, y \right)$$

$$\boxed{\text{Vertex} = \left(\frac{-b}{2a}, y \right)}$$

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

$$y = x^2 + 4x - 5$$

$$y = x^2 + 8x + 7$$

$$y = x^2 + 6x - 16$$

$$y = x^2 - 2x - 15$$

$$y = x^2 - 10x + 9$$

$$y = 2x^2 - 12x - 14$$

$$y = 4x^2 + 6x - 3$$

$$y = 4x^2 + 2x - 1$$

$$y = x^2 + \frac{1}{2}x + 5$$

$$y = 2x^2 - \frac{1}{2}x + 9$$

$$y = -2x^2 - .05x$$