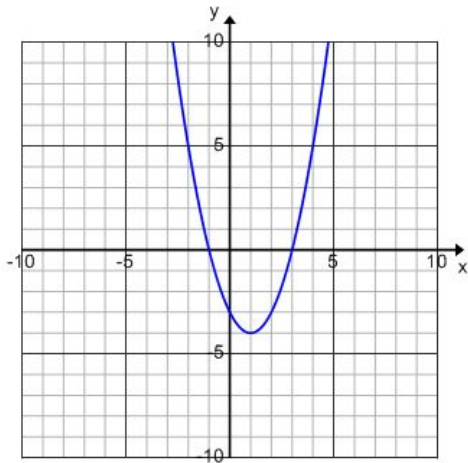
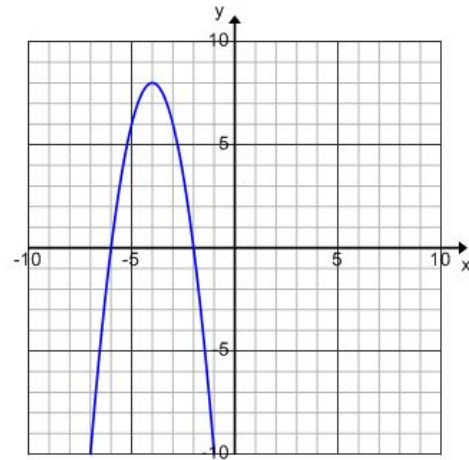


SM2 A#5.7 Quadratic Graphs $\Leftrightarrow$ x-int Form $\Leftrightarrow$ Standard Form1. Write the equation of the graph in **X-INT** form.

x-int form:

Standard Form:

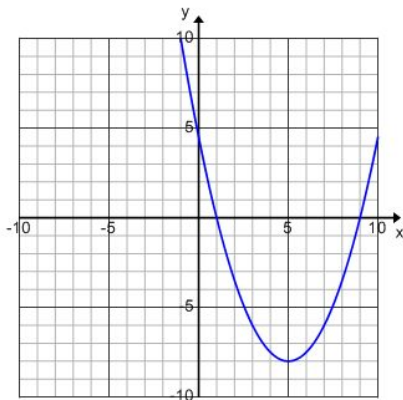
Vertex Form:

2. Write the equation of the graph in **X-INT** form.

x-int form:

Standard Form:

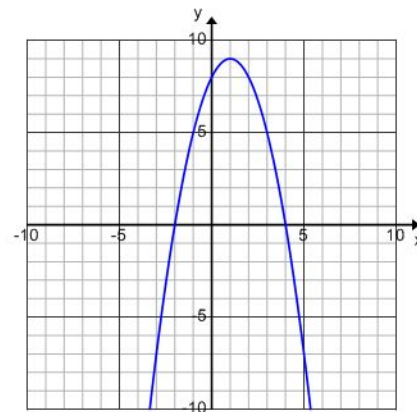
Vertex Form:

3. Write the equation of the graph in **x-int** form and then in **Standard** form.

x-int form:

Standard form:

Vertex Form:

4. Write the equation of the graph in **x-int** form and then in **Standard** form.

x-int form:

Standard form:

Vertex Form:

5. Write the equation $y = -2(x - 2)(x + 3)$ in Standard Form.6. Given the **zeros** $\frac{5}{2}$ & -3 . Write an equation in Standard Form.

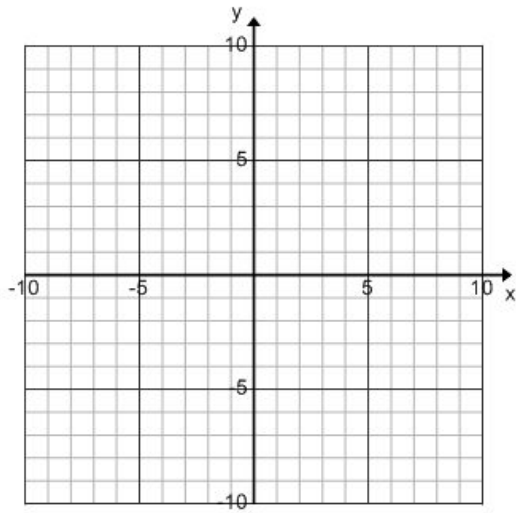
7. Given the **Roots** $\frac{1}{2}$ & 6. Write an equation in Standard Form.

8. The **x-intercepts** are $x = -4$ & $x = 1$, write an equation in x-int form & standard form.

x-int form:

Standard form:

9. Sketch a the graph that has zeros of -7 & 1



10. Factor: $x^2 - 4x - 45$

11. Factor:
 $5x^2 + 39x - 8$

12. Factor Completely:
 $7x^2 + 28x - 147$

____(x____)(x____)

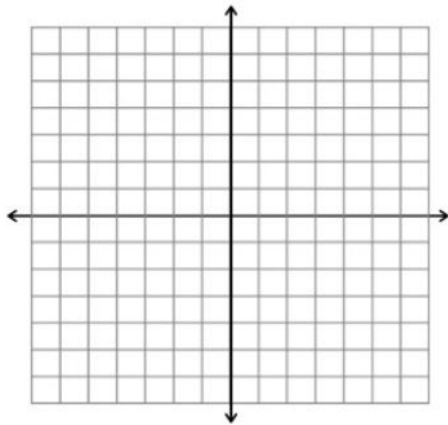
13. Factor Completely:
 $4x^2 - 36$

____(x____)(x____)

14. Factor out the GCF
 $15x^3y^2 - 35x^4y$

15. Find the zeros, then sketch a graph.

$$2x^2 - 18x = -36$$



16. Find the solutions:

$$x^2 - 70 = -3x$$

What are the 3 other words to describe solutions?

17. For the quadratic Polynomial list the following:

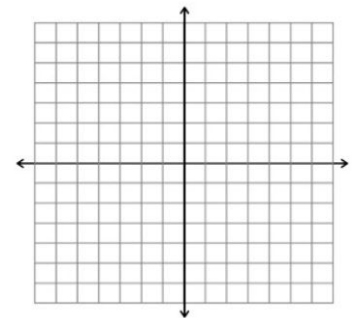
$$3x^2 + 13x - 30$$

Factors	Coefficients	Terms

18. Factor: $y = 4x^2 + 2x - 30$ x-intercepts: (,)
(,)

y-intercept (,)

Graph the above and label your graph:



19. From the graph at the right Find the following and decide if the following are standard form, vertex form, or x-intercept form. Then complete so they match the graph.

What are the roots of the graph

x-Intercept Form: $y = \underline{\hspace{1cm}}(x \underline{\hspace{1cm}})(x \underline{\hspace{1cm}})$ Standard Form: $y = \underline{\hspace{1cm}}x^2 + \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$ Vertex Form: $y = \underline{\hspace{1cm}}(x \underline{\hspace{1cm}})^2 + \underline{\hspace{1cm}}$ 