Score: _____ NAME: _____

Assessment Training Practice #2B

1.) Examine the quadratic function below. Label the graph with parts a – g.

a.) Find the y-intercept _____

b.) What are the different names for the x-intercepts? _____

_____

c.) Find the x-intercept(s) _____

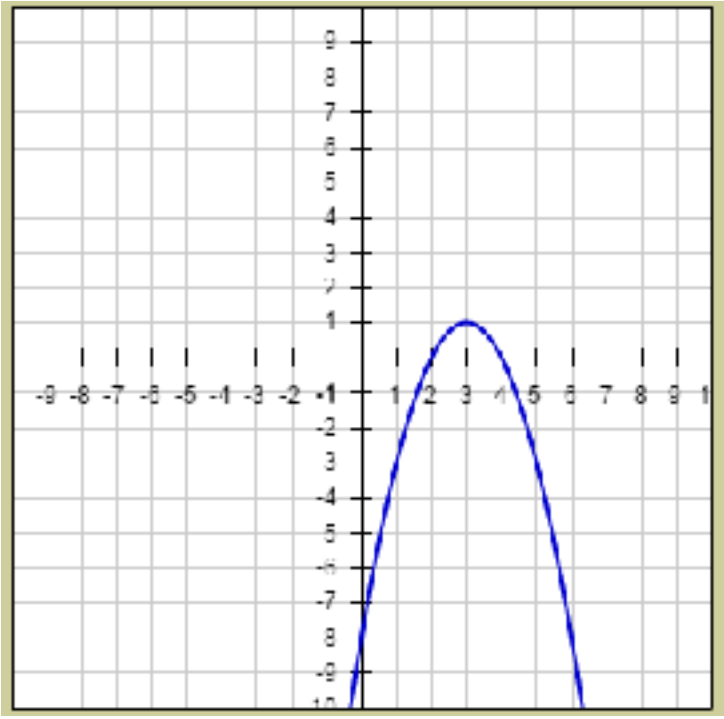
d.) Identify the vertex _____

e.) Is the vertex a maximum or a minimum? Why? _____

_____

f.) Write the equation of the axis of symmetry _____

g.) Write an equation for this quadratic function (a = 1 or a = -1) _____



2.) Examine the quadratic function below. Label the graph with parts a – f.

a.) Find the y-intercept _____

b.) Find the x-intercept(s)/Zero(s)/ root(s)/ solution(s) _____

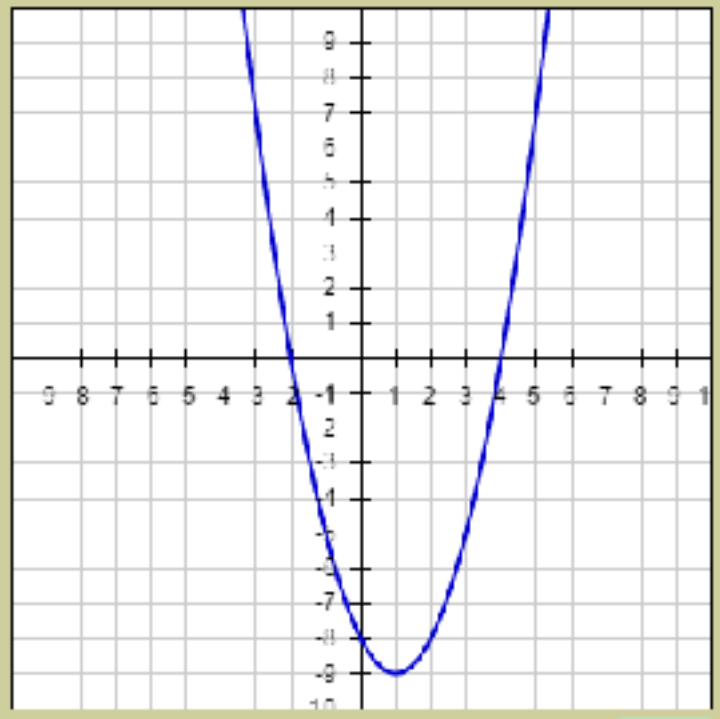
c.) Identify the vertex _____

d.) Is the vertex a maximum or a minimum? Why? _____

_____

e.) Write the equation of the axis of symmetry _____

f.) Write an equation for this quadratic function (a = 1 or a = -1) _____



3.) Examine the quadratic function below. Label the graph with parts a – f.

a.) Find the y-intercept _____

b.) Find the x-intercept(s)/Zero(s)/ root(s)/ solution(s) _____

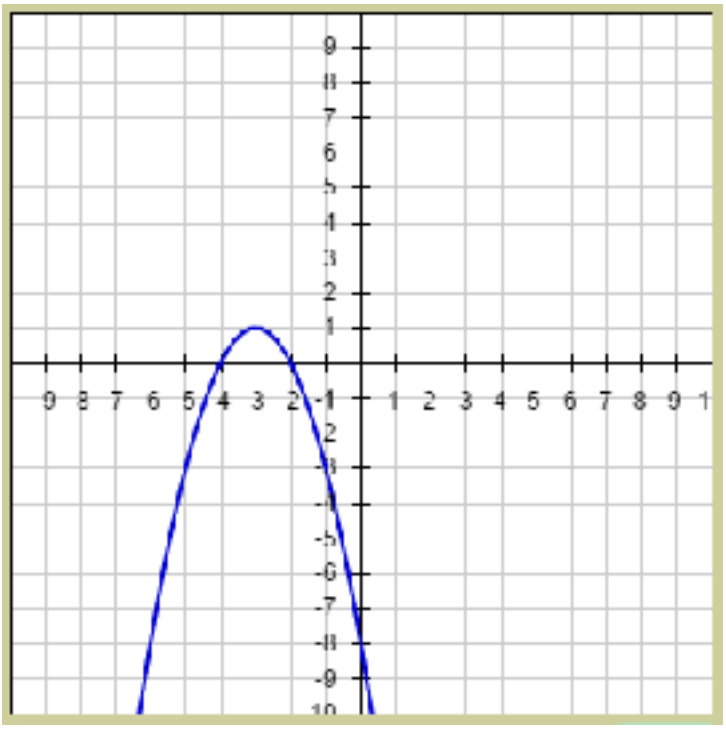
c.) Identify the vertex _____

d.) Is the vertex a maximum or a minimum? Why? _____

_____

e.) Write the equation of the axis of symmetry _____

f.) Write an equation for this quadratic function (a = 1 or a = -1) _____



4.) Examine the quadratic function below. Label the graph with parts a – f.

a.) Find the y-intercept _____

b.) Find the x-intercept(s)/Zero(s)/ root(s)/ solution(s) _____

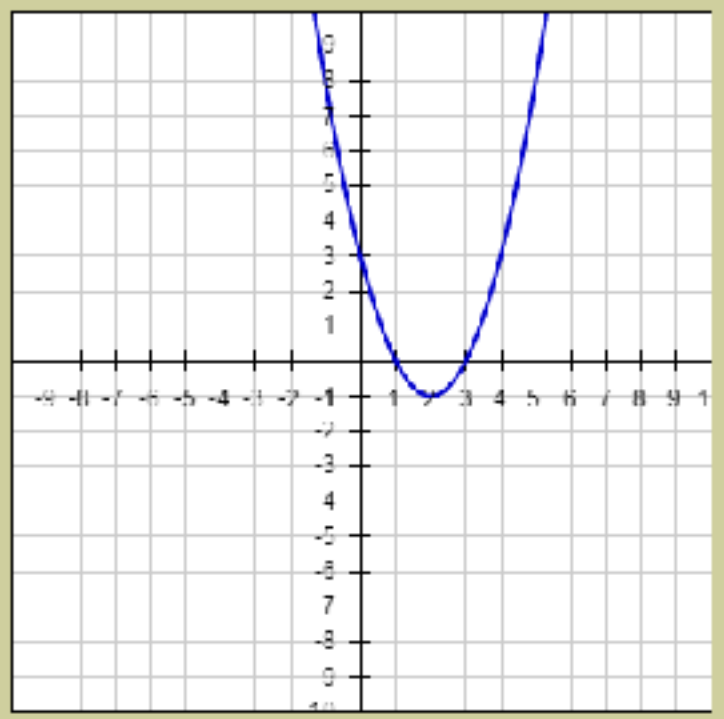
c.) Identify the vertex _____

d.) Is the vertex a maximum or a minimum? Why? _____

_____

e.) Write the equation of the axis of symmetry _____

f.) Write an equation for this quadratic function (a = 1 or a = -1) _____



Factor each expression for 5 – 8.

5.) $4x^4 + 8x^3 - 6x^2$

6.) $3s^2 - 3s - 48$

7.) $16y^2 - 36$

8.) $18g^2 - 21g - 4$

9.) Explain what can be determined by looking at each form of a quadratic function.

a.) Standard form $y = ax^2 + bx + c$

_____

_____

b.) Factored form $y = a(x - p)(x - q)$

_____

_____

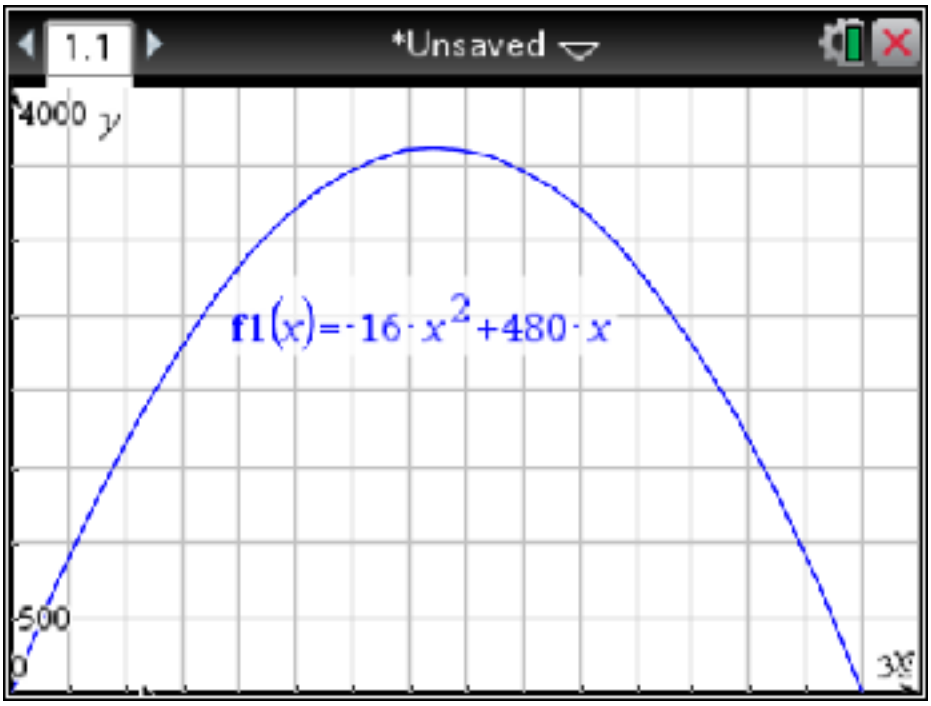
c.) Vertex form $y = a(x - h)^2 + k$

_____

_____

The following is a graph of the path of a rocket after it is launched.

Height in Feet



Time in Seconds

10.) Explain the real world meaning of the following points.

Height is in feet and time is in seconds.

a.) Vertex _____

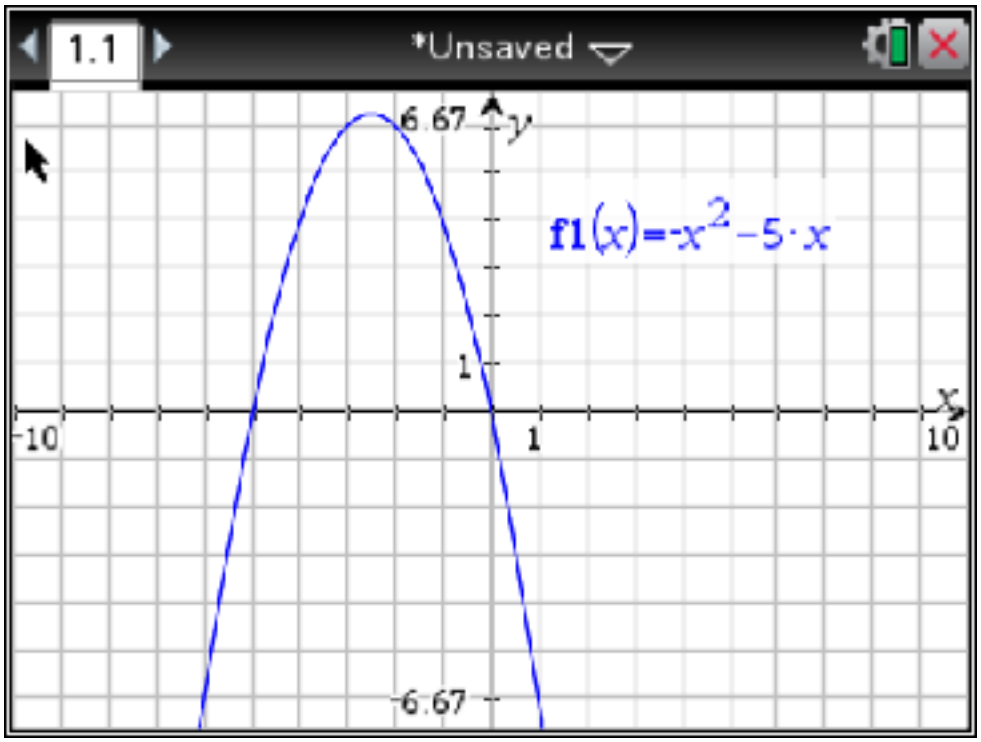
b.) x-intercept(s) _____

11.) What does the x represent in the function?

12a.) How long does it take for the rocket to reach the ground?

12b.) What is the fall time of the rocket?

13.) Examine the function below.



x	y
-6	-6
-5	0
-4	4
-3	6
-2	6
-1	4
0	0
1	-6

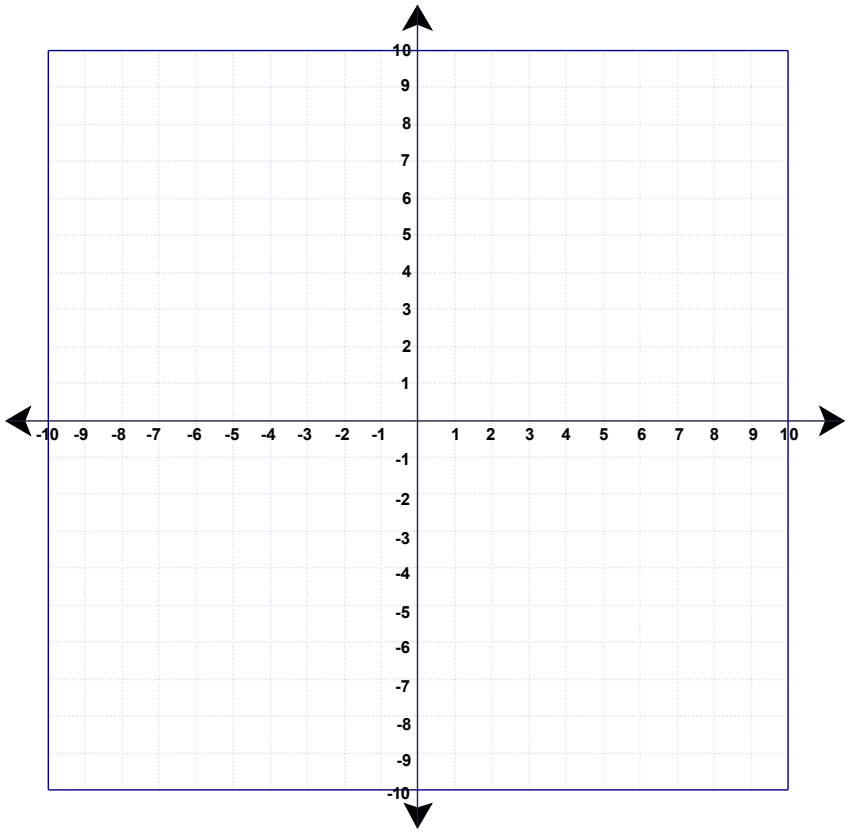
13.) What point is missing from the table?

14a.) How can you find the vertex of this graph?

14b.) Find the vertex. Show your work.

15.) Explain why you could not see the vertex in the table.

16.) Graph the function: $f(x) = (x - 4)(x + 2)$



x	y

_____ Plot the parabola correctly.

_____ Label the coordinates of the vertex on the graph.

If necessary, use the formula.

_____ Label the coordinates of the y-intercept on the graph.

_____ Show the Axis of Symmetry

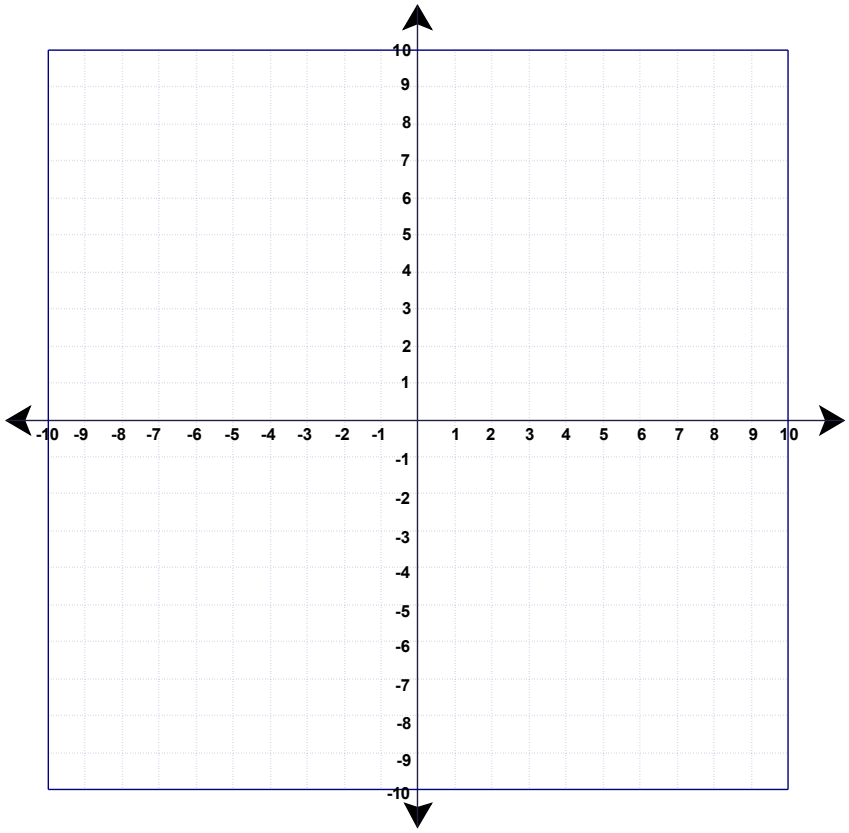
_____ Write the equation of the Axis of Symmetry.

_____ Label the zeros on the graph.

If necessary, use the quadratic formula.

17.) Graph the function: $f(x) = \frac{1}{3}(x - 1)^2 - 4$

x	y



_____ Plot the parabola correctly.

_____ Label the coordinates of the vertex on the graph.

If necessary, use the formula.

_____ Label the coordinates of the y-intercept on the graph.

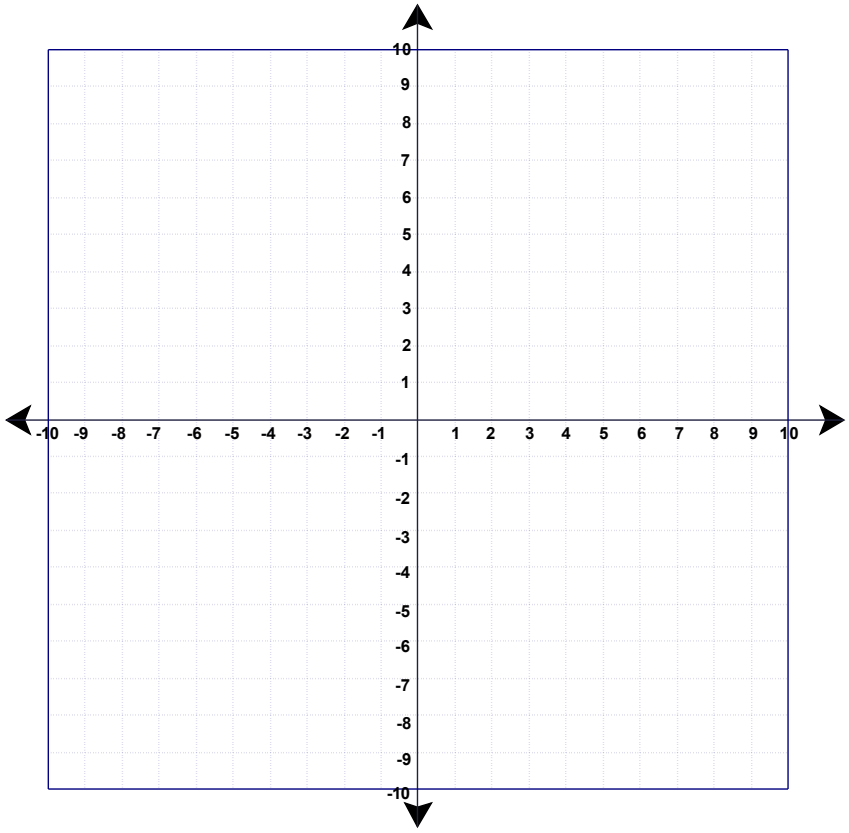
_____ Show the Axis of Symmetry

_____ Write the equation of the Axis of Symmetry.

_____ Label the roots on the graph.

If necessary, use the quadratic formula.

18.) Graph the function: $f(x) = -2(x + 5)^2$



x	y

_____ Plot the parabola correctly.

_____ Label the coordinates of the vertex on the graph.

If necessary, use the formula.

_____ Label the coordinates of the y-intercept on the graph.

_____ Show the Axis of Symmetry

_____ Write the equation of the Axis of Symmetry.

_____ Label the solutions on the graph.

If necessary, use the quadratic formula.