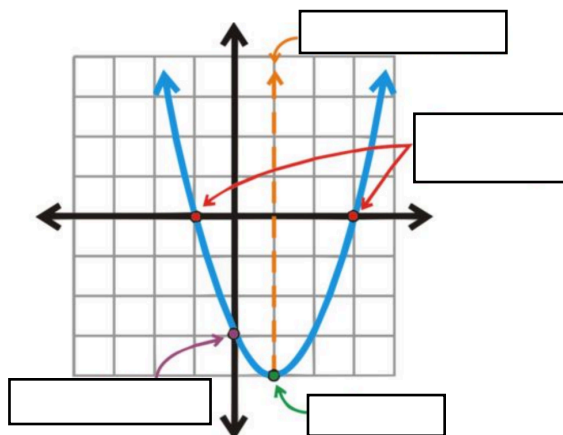


Homework Week of Feb. 18

1.) Label the parts of the parabola.



a
 b
 c
 $-\frac{b}{2a}$
 $y = ax^2 + bx + c$
 $y = a(x - h)^2 + k$
 axis of symmetry
 down
 maximum
 minimum
 roots
 solutions
 up
 vertex
 x-intercepts
 y-intercept
 zeros

Vocabulary Check

Each word at the right can be used once or not at all.

- 2.) The point where the graph changes direction is called the _____.
 - 3.) The imaginary line that cuts the graph into two equal parts is called the _____.
 - 4.) If a graph opens up it will have a _____ value.
 - 5.) If a graph opens down it will have a _____ value.
 - 6.) The equation to find the x-value of the vertex is _____.
 - 7.) In Standard form, the value of _____ represents _____.
 - 8.) Standard form of the quadratic function can be represented by the equation _____.
 - 9.) The graph of a quadratic function can have one, two, or no _____.
- These are also known as _____, _____, or _____.
- 10.) In standard form, the value of _____ will determine if the graph is concave _____ or concave _____.

Based on the equation, identify the parts of the parabola.

11.) $y = 2x^2 + 8x + 5$

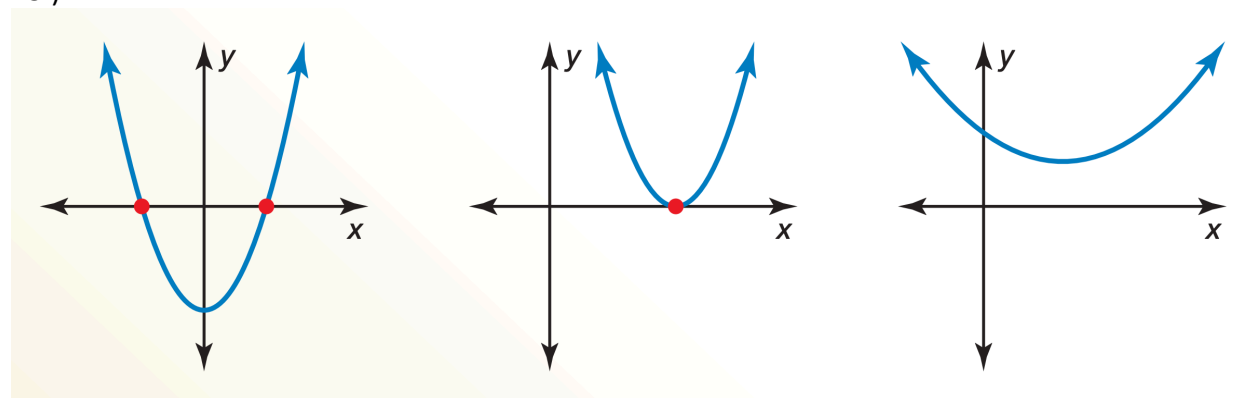
Direction of opening	
Maximum or minimum	
Axis of symmetry	
Vertex	
y-intercept	
Domain	
Range	

12.) $f(x) = -4x^2 + 16x - 4$

Direction of opening	
Maximum or minimum	
Axis of symmetry	
Vertex	
y-intercept	
Domain	
Range	

Determine the number and types of solutions for each graph.

13.)



of solutions _____

of solutions _____

of solutions _____

Type of solutions _____

Type of solutions _____

Type of solutions _____