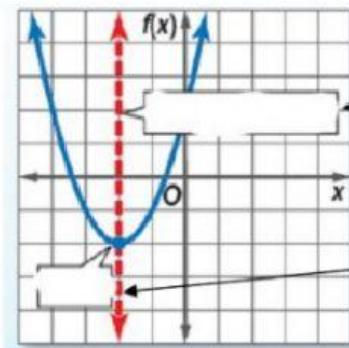


Characteristics of Parabola

Complete the following by dragging the corresponding word to correctly fill in the blanks.

- The shape of a quadratic equation is called a _____ $ax^2 + bx + c$
- Factored form of a quadratic function is $y =$ _____ $a(x - d)^2 + c$
- When the vertex is the lowest on the graph, we call that a _____
- Standard form of a quadratic function is $y =$ _____ $a(x - r)(x - s)$
- When the vertex is the highest on the graph, we call that a _____ Axis of symmetry
- The solutions to quadratic equations are called _____ Maximum
- The quadratic equation crosses the vertical axis at the _____ Minimum
- The graph opens up when the leading coefficient is _____ Negative
- The graph reflects over the x-axis when the a value is _____ Parabola
- Vertex form of a quadratic function is $y =$ _____ Positive



10. _____

11. _____

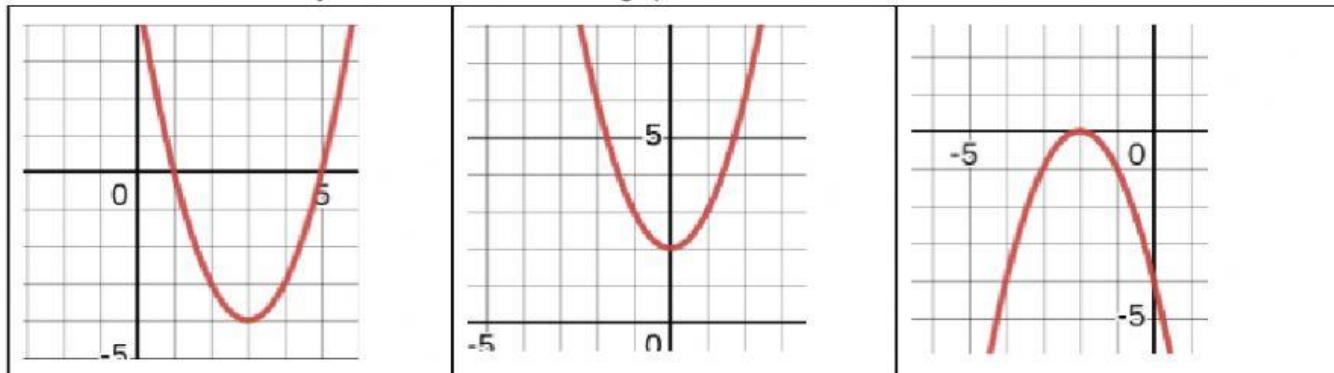
x-intercept

Vertex

y-intercept

zeros/roots

12. Determine how many real roots the following quadratic functions have and the actual roots:



of roots: _____

of roots: _____

of roots: _____

Actual root(s) _____

Actual root(s) _____

Actual root(s) _____