

NAME: _____ DATE: _____

CHARACTERISTICS OF QUADRATIC FUNCTIONS

DIRECTIONS: USE the KNOW GRAPH EQUATION TO FIND the characteristics. Then match a graph. 😊

Vertex form:

Standard Form:

$$x^2 - 6x + 12$$

y-intercepts:

zeros:

Vertex:

Axis of symmetry:

As $x \rightarrow \infty$, $y \rightarrow$

As $x \rightarrow -\infty$, $y \rightarrow$

As $x \rightarrow \infty$, $y \rightarrow$

As $x \rightarrow -\infty$, $y \rightarrow$

Axis of symmetry:

Graph letter _____
matches these characteristics.

Graph letter _____
matches these characteristics.

y-intercepts:

zeros:

Vertex:

Vertex form:

Standard Form:

$$-2x^2 - 4x + 2$$

Roots:

Y-intercept:

As $x \rightarrow \infty$, $y \rightarrow$

As $x \rightarrow -\infty$, $y \rightarrow$

y-intercepts:

X- intercepts:

Vertex form:

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

Standard Form:

Vertex form:

Standard Form:

$$2x^2 + 4x + 5$$

Graph Letter —
matches these
characteristics.

Vertex:

**Axis of
Symmetry:**

**Axis of
symmetry:**

Graph Letter —
matches these
characteristics.

Vertex:

As $x \rightarrow \infty$, $y \rightarrow$

As $x \rightarrow -\infty$, $y \rightarrow$



