

# VERTEX FORM

How to calculate the...

VERTEX	X-INTERCEPT(S)	Y-INTERCEPT

**Practice:** Calculate the key features of each equation.

1.  $y = 2(x - 5)^2 + 3$

Vertex:

X-intercept(s):

Y-intercept:

Open up or down?

2.  $y = -\frac{1}{2}(x + 4)^2 + 1$

Vertex:

X-intercept(s):

Y-intercept:

Open up or down?

# Factored Form

How to calculate the...

Vertex	X-intercept(s)	Y-intercept

**Practice:** Calculate the key features of each equation.

1.  $y = -\frac{1}{2}(x + 3)(x - 5)$

Vertex:

X-intercept(s):

Y-intercept:

Open up or down?

2.  $y = \frac{3}{2}(x + 1)(x + 7)$

Vertex:

X-intercept(s):

Y-intercept:

Open up or down?

# Standard Form

How to calculate the...

Vertex	X-intercept(s)	Y-intercept

**Practice:** Calculate the key features of each equation.

1.  $y = 3x^2 - x - 4$

Vertex:

X-intercept(s):

Y-intercept:

Open up or down?

2.  $y = -x^2 - 6x - 8$

Vertex:

X-intercept(s):

Y-intercept:

Open up or down?