

Find the vertex, axis of symmetry, and vertex form of the function given in standard form **without completing the square**.

Then find the x-intercepts by using the vertex form of the equation.

1. $y = -3x^2 + 6x + 5$

Find the vertex, axis of symmetry, and vertex form of the function given in standard form **by completing the square**.

2. $y = x^2 - 10x + 5$

Find the vertex, axis of symmetry, and vertex form of the function given in standard form **without completing the square**. (Use $x = -b/2a$)

Then find the x-intercepts using the vertex form of the equation

2. $y = 2x^2 - 10x + 5$

Find the vertex, axis of symmetry, and vertex form of the function given in standard form **by completing the square**.

Then find the x-intercepts using the quadratic formula

2. $y = 2x^2 - 10x + 5$

1. Find the equation of the quadratic function given the following information.
2. Then find the x-intercepts of the function.

Vertex $(-1, 5)$ Point on the quadratic function $(-4, -5)$

Find the vertex, axis of symmetry, and vertex form of the function given in standard form **without completing the square**. (Use $x = -b/2a$)

Then find the x-intercepts using the vertex form of the equation

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

Find the vertex, axis of symmetry, and vertex form of the function given in standard form **by completing the square**.

Then find the x-intercepts using the quadratic formula

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