

Graphing Quadratic Functions (from Standard Form)

✎ **Objective:** *You will be able to graph quadratic functions.*

★ 1) With your group, discuss the processes involved with graphing quadratic functions given vertex form. Then discuss the processes involved with graphing quadratic functions given intercept form.

★ 2) Consider the given quadratic in standard form.

$$y = 2x^2 - 12x + 16$$

With your group, devise a plan for graphing the quadratic.

Could you have gone about creating the graph in a different way? Explain.

Practice: Sketch a graph of each quadratic function on graph paper.

1. $f(x) = -x^2 + 3x + 10$

2. $y = x^2 - 14x + 45$

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

4. $y = 5x^2 + 3x - 2$

5. $f(x) = \frac{1}{2}x^2 - 8$

6. $y = 2x^2 + 4x - 16$

Write down any important reminder from today's lesson or any questions you have regarding today's lesson.