

Name \_\_\_\_\_

Date \_\_\_\_\_

Advanced Algebra

Unit 4: Quadratics

**I can use the axis of symmetry to find the equation of a parabola.**

The axis of symmetry equation is given by  $x = \frac{-b}{2a}$

For this assignment you can assume the leading coefficient  $a = 1$ . Find the equation of the given parabola and sketch a graph labeling some critical points.

1) The middle is -5.5 and 1 root is 8

2) The axis of symmetry is  $x = 5$  and one root is -6

3) The middle is 4.5 and the graph cuts the x axis at -4

4) The axis of symmetry is 4 and one root is -2

5) The middle is 4.5 and the graph cuts the x axis at -7

6) The middle of the parabola is 7 and one root is -6