

### Classwork #8 on Quadratics

Solve by any means

1)  $x^2 - 10x = 0$

2)  $4x^2 - 21x + 5 = 0$

3)  $x^2 - 8x + 5 = 0$

Without solving, determine the number and type of solutions for each

4)  $x^2 + 17x + 52$

5)  $6x^2 - 10x + 7$

What is the axis of symmetry

6)  $y = x^2 + 7x - 21$

What is the y-intercept and its point of symmetry

7)  $y = x^2 + 8x - 4$

For the following find the vertex using 2 different methods:  $f(x) = x^2 - 6x - 7$

8) Method 1:

9) Method 2:

Graph each. Use the method of graphing appropriate for the given form of the quadratic.

10)  $y = -x^2 - 4x + 1$

11)  $y = \frac{1}{2}(x-2)^2 - 3$

12)  $y = 2(x+5)(x+1)$

