

**Quadratic Equations**

- If you solve by graphing, you need to include your sketch and write the equation(s) that you graphed.
- If you solve with the quadratic formula, you need to express your answer(s) as radicals in

lowest terms.  $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

1. Solve both equations; solve at least one by factoring:

a)  $3x^2 - 10x - 8 = 0$

b)  $x^2 = 3x + 10$

2. Solve all three equations; solve at least two by graphing, rounded to nearest hundredth if necessary:

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

b)  $5x - 1 = 3x^2 + x$

c)  $3x^2 + x - 1 = 2x^2 - x$

3. Solve with the quadratic formula, exact answers in lowest terms:

a)  $x^2 - 4x - 2 = 0$

b)  $3x^2 + 2 = x^2 - x + 6$

4. Solve by any method. Round off your answers to nearest hundredth, if necessary:

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

b)  $8x^2 + 5x = 2x + 4$