

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

## Quadratic Formula Assignment

Use the quadratic formula to solve. Express your answers as approximate roots (round to the nearest hundredth)

1.  $x^2 - 5x - 14 = 0$

4.  $2x^2 - 3x - 5 = 0$

2.  $2x^2 + 2x - 12 = 0$

5.  $x^2 - 4x + 4 = 0$

3.  $3x^2 + 4x = -10$

6.  $5x^2 + 9x + 4 = 0$

36

7.  $2x^2 - 7x - 3 = 0$

10.  $-5x^2 + 7x = -1$

8.  $9x^2 + 12x + 4 = 0$

11.  $9x^2 - 8x - 3 = 0$

9.  $-3x^2 - 2x + 5 = 0$

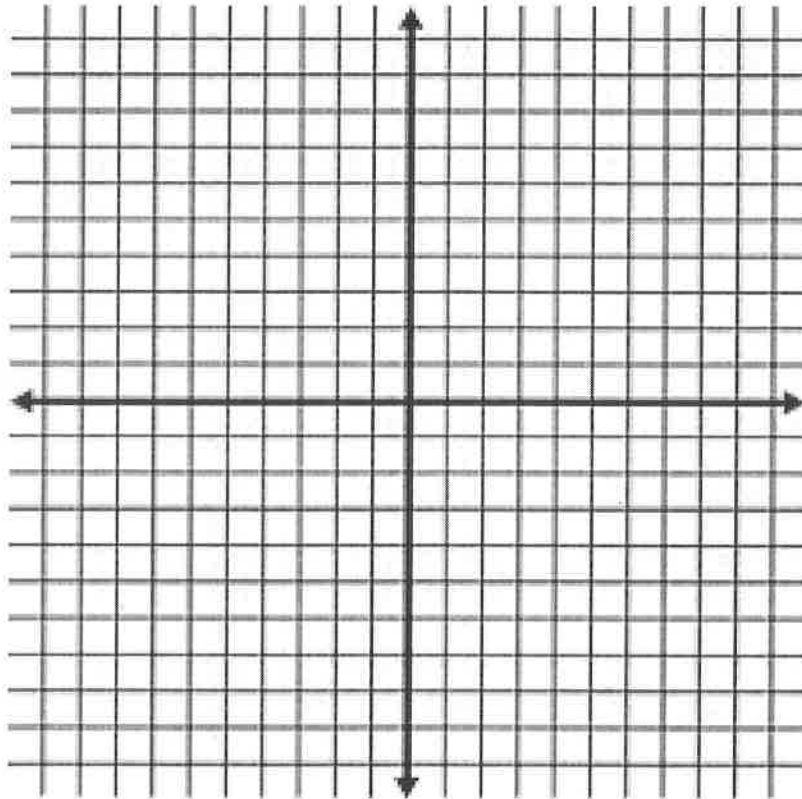
12.  $-7x^2 + 10x - 2 = 0$

13. For the quadratic expression  $2x^2+3x-20$ :

a) Solve using the quadratic formula (find approximate roots).

b) Find the vertex

c) Graph (labeling the vertex and x-intercepts)



14. For the quadratic expression  $2x^2+9x+7$ :

a) Solve using the quadratic formula (find approximate roots).

b) Find the vertex

c) Graph (labeling the vertex and x-intercepts)

