## Basic Skills Five

Use COMPLETING THE SQUARE to put the quadratic in VERTEX FORM.

1) 
$$y = 2x^2 + 24x + 69$$

Use the information provided to write the vertex form equation of each parabola.

2) Opens up or down, Vertex: (-3, 3), Passes through: (-1, 11)

Solve each equation by taking square roots.

3) 
$$b^2 = 49$$

4) 
$$-5r^2 = -40$$

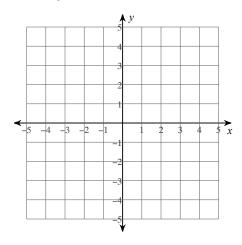
$$5) \ 3 - 4x^2 = -69$$

Identify the x-intercepts of each. Hint - Let "y" = 0 and solve for "x"

6) 
$$y = 2(x+3)^2 - 8$$

Solve each system by graphing.

$$7) \quad y = -x + 2$$
$$y = \frac{1}{3}x - 2$$



Solve each system by substitution.

$$8) \quad y = x - 4$$
$$y = 2x - 5$$