

## Intermediate Algebra Skill

### Solving Quadratic Inequalities: Quadratic Expression Not Factored; RHS 0

Solve the following Quadratic Inequalities:

$$1) x^2 + 5x + 6 > 0$$

$$2) x^2 + 4x + 3 \geq 0$$

$$3) x^2 - 2x - 24 < 0$$

$$4) x^2 - 5x - 14 \leq 0$$

$$5) y^2 + y - 20 \geq 0$$

$$6) y^2 + 3y - 10 > 0$$

$$7) y^2 - 8y + 15 \leq 0$$

$$8) y^2 - 10y + 21 < 0$$

$$9) 4n^2 + 4n - 3 > 0$$

$$10) 9n^2 - 3n - 2 \geq 0$$

$$11) 6n^2 - 11n + 4 < 0$$

$$12) 5n^2 + 8n + 3 < 0$$

**Answers to Solving Quadratic Inequalities: Quadratic Expression Not Factored;  
RHS 0**

1)  $(-\infty, -3) \cup (-2, \infty)$

2)  $(-\infty, -3] \cup [-1, \infty)$

3)  $(-4, 6)$

4)  $[-2, 7]$

5)  $(-\infty, -5] \cup [4, \infty)$

6)  $(-\infty, -5) \cup (2, \infty)$

7)  $[3, 5]$

8)  $(3, 7)$

9)  $(-\infty, -\frac{3}{2}) \cup (\frac{1}{2}, \infty)$

10)  $(-\infty, -\frac{1}{3}] \cup [\frac{2}{3}, \infty)$

11)  $\left(\frac{1}{2}, \frac{4}{3}\right)$

12)  $\left(-1, -\frac{3}{5}\right)$