

## Intermediate Algebra Skill

### Solving Quadratic Inequalities: Quadratic Expression Already Factored; RHS 0

Solve the following Quadratic Inequalities:

1)  $(x+3)(x+2) > 0$

2)  $(x+3)(x+1) \geq 0$

3)  $(x+4)(x-6) < 0$

4)  $(x+2)(x-7) \leq 0$

5)  $(z+5)(z-4) \geq 0$

6)  $(a+5)(a-2) > 0$

7)  $(y-3)(y-5) \leq 0$

8)  $(y-3)(y-5) < 0$

9)  $(2x+3)(2x-1) > 0$

10)  $(3n+1)(3n-2) \geq 0$

11)  $(2x-1)(3x-4) < 0$

12)  $(y+1)(5y+3) < 0$

**Answers to Solving Quadratic Inequalities: Quadratic Expression Already 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)  $\left(-\infty, -\frac{3}{2}\right) \cup \left(\frac{1}{2}, \infty\right)$

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

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

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