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) \((-\infty, -\frac{3}{2}) \cup \left(\frac{1}{2}, \infty\right)\)

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

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

12) \((-1, -\frac{3}{5}]\)