

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