

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

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

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

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