

Intermediate Algebra Skill

Solving Linear Inequalities, Using Two or more Properties

Solve the linear inequalities:

1) $3x - 7 > 5$

2) $2x + 5 > 9$

3) $2x - 3 < 9$

4) $3x - 5 < 4$

5) $1 - 2y \geq 7$

6) $4 - 5y \geq -1$

7) $2 - 6y \leq 11$

8) $13 - 4y \leq 5$

9) $5n - 3 < 2n - 6$

10) $8n + 5 < 3n - 5$

11) $n - 8 \geq 4n + 1$

12) $6n + 2 \geq 10n - 10$

13) $2(x - 5) \leq 8$

14) $-3(2x - 5) > 18$

Answers to Solving Linear Inequalities, Using Two or more Properties

- 1) $\{x|x > 4\}; (4, \infty)$
- 2) $\{x|x > 2\}; (2, \infty)$
- 3) $\{x|x < 6\}; (-\infty, 6)$
- 4) $\{x|x < 3\}; (-\infty, 3)$
- 5) $\{y|y \leq -3\}; (-\infty, -3]$
- 6) $\{y|y \leq 1\}; (-\infty, 1]$
- 7) $\left\{y|y \geq -\frac{3}{2}\right\}; \left[-\frac{3}{2}, \infty\right)$
- 8) $\{y|y \geq 2\}; [2, \infty)$
- 9) $\{n|n < -1\}; (-\infty, -1)$
- 10) $\{n|n < -2\}; (-\infty, -2)$
- 11) $\{n|n \leq -3\}; (-\infty, -3]$
- 12) $\{n|n \leq 3\}; (-\infty, 3]$
- 13) $\{x|x \leq 9\}; (-\infty, 9]$
- 14) $\left\{x|x < -\frac{1}{2}\right\}; \left(-\infty, -\frac{1}{2}\right)$