

Unit 7 Objective 2 Remediation
Solve inequalities that involve addition

Addition Property of Inequality: If equal amounts are added to the expressions on each side of an inequality, the resulting inequality is still true.

Goal: Get the variable by itself by adding a number to each side of the inequality.

Examples:

A. $x - 3 < -5$

$$\begin{array}{r} +3 \quad +3 \\ x - 3 < -5 \end{array}$$

$$x < -2$$

B. $-4 + x \geq 9$

$$\begin{array}{r} +4 \quad +4 \\ -4 + x \geq 9 \end{array}$$

$$x \geq 13$$

Try These:

1.) $x - 7 > 5$

2.) $x - 3 < 12$

3.) $x - 13 \leq -4$

4.) $m - 4 \geq -15$

5.) $k - 5 > 12$

6.) $g - 9 < -19$

7.) $h - \frac{1}{2} > \frac{5}{2}$

8.) $j - \frac{1}{3} \leq \frac{7}{3}$

9.) $k - 2\frac{1}{3} > \frac{2}{3}$

10.) $f - 1\frac{1}{2} < 3\frac{2}{3}$

11.) $x - 17 > 43$

12.) $11 \leq m - 14.5$

13.) $y - 18 > -3$

14.) $10 \geq -3 + b$

15.) $x - 44,500 > 16,950$

16.) $-25 > g - 9$

17.) $a - 4 < -4$

18.) $x - 8 > 22$

19.) $x - 7 > -13$

20.) $x - 4 < 14$