

Unit 7 Objective 3 Remediation

Solve inequalities that involve subtraction

Subtraction Property of Inequality: If equal amounts are subtracted from the expressions on each side of an inequality, the resulting inequality is still true.

Goal: Get the variable by itself by subtracting a number from each side of the inequality.

Examples:

A. $x + 3 < -5$

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

$$x < -8$$

B. $4 + x \geq 9$

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

$$x \geq 5$$

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.) $-3 \geq b + 11$

12.) $z + 1 \leq 5$

13.) $17 + k \leq 10$

14.) $p + 8 > -4$

15.) $r + 13 < 9$

16.) $x + 13 \geq 5$

17.) $20 \geq p + 16$

18.) $9 + n > -4$

19.) $-3 \geq x + 16$

20.) $r + 9 \leq 7$