

Chap 2 Sec 1

Softbook Pg 19

Writing & Graphing Inequality

Write the sentence as an inequality

1) 12 is greater than or equal to 5 times a number n.

$$12 \geq 5(-10)$$

$$12 \geq -50$$

True

$$12 \geq 5n$$

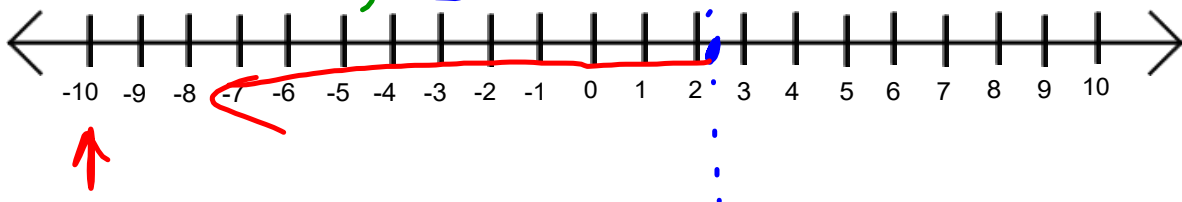
$$\frac{12}{5} \geq n$$

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$$12 \geq 5(7)$$

$$12 \geq 35$$

False



2) $\frac{1}{3}$ of a number h is less than 15.

$$\frac{1}{3}(h) < 15$$

3) 7 is less than or equal to the difference of a number q and 6.

$$7 \leq q - 6$$

4) The sum a number u and 14 is more than 6.

$$u + 14 > 6$$

$$5) \underset{\approx}{d} \cdot 7 < 12; \quad \underset{\approx}{d} = 19$$

$$19 \cdot 7 < 12$$

$$12 < 12$$

Not sol

$$6) 9 \geq \underset{\approx}{3n} + 6; \quad n = \underset{\approx}{1}$$

$$9 \geq 3(1) + 6$$

$$9 \geq 9 \quad \text{yes sol}$$

$$7) -15 \leq \underset{\approx}{x} \div 4; \quad \underset{\approx}{x} = -10 \quad 8) -8.4 > \underset{\approx}{5z} + 2.4; \quad \underset{\approx}{z} = 1.6$$

$$-15 \leq -10 \div 4$$

$$-15 \leq -\frac{5}{2} \text{ or } -2.5$$

Yes sol

$$-8.4 > 5(1.6) + 2.4$$

$$-8.4 > 8.00 + 2.4$$

$$-8.4 > 10.4$$

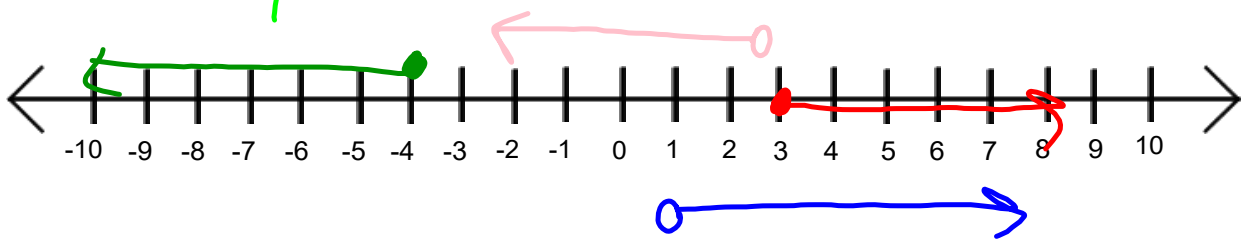
NO sol

$$9) \quad x \geq 3$$
$$4 \geq 3 \text{ True}$$

$$11) \quad x > \frac{3}{4}$$
$$7 > \frac{3}{4} \text{ True}$$

$$10) \quad x \leq -4$$
$$-6 \leq -4 \text{ True}$$

$$12) \quad 2.8 > x$$
$$2.8 > 1 \text{ True}$$



$$13) \quad 1 < x \quad 14) \quad 0 > x$$
$$x > 1 \quad x < 0$$

$$15) \quad -3 \leq x \quad 16) \quad 3 \geq x$$
$$x \geq -3 \quad x \leq 3$$

$$17) \quad 2500 \geq x$$
$$x \leq 2500$$