

Warm - up:

Justify the given statement using the properties of numbers.

$$\frac{1}{5}x - (-2) = 7 \quad x = 25$$

$$\frac{1}{5}x + 2 = 7 \quad \text{P. Opp. Sum}$$

$$\frac{1}{5}x + 2 - 2 = 7 - 2 \quad \text{Sub. of Eq.}$$

$$\frac{1}{5}x = 7 - 2 \quad \text{Axiom of Opp.}$$

$$\frac{1}{5}x = 5 \quad \text{Simplification}$$

$$5 \cdot \frac{1}{5}x = 5 \cdot 5 \quad \text{Mult. P. Equ.}$$

$$5 \cdot \frac{1}{5}x = 5 \cdot 5$$

$$5 \cdot \frac{1}{5}x = 25 \quad \text{Simplify}$$

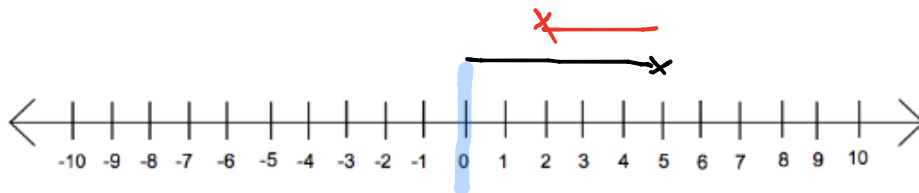
$$x = 25 \quad \text{Axiom of R.}$$

Vocabulary:

-- Integers *All whole numbers + their opposites*

-- Absolute value *Distance from zero*

$$5 + (-3)$$



Examples.

a. $-3 + 11 = 5 + 3$

b. $-19 + 4 = 21 + (-36)$

c. $|-6| + |-4| = |-3| + |-7| \quad \neq \quad |7|$

d. $\underline{45} + 16 = \underline{23} + \underline{38}$

$$-1 + (-3)$$

