

LINEAR RELATION

PART 2

1. Solving Equations with Variables on Both Sides

$$5x + 10 = 3x - 8$$

Steps: 1) + or - terms to get the variables on one side and the constants on the other.

2) \times or \div to isolate the variable.

examples :

$$\text{a) } 8x = 4x - 2$$
$$-4x \quad -4x$$

$$\frac{4x}{4} = \frac{-2}{4}$$

$$\boxed{x = -\frac{1}{2}}$$

$$\text{b) } 7x + 5 = 8x - 4$$
$$-7x \quad -7x$$

$$5 = x - 4$$
$$+4 \quad +4$$

$$\boxed{9 = x}$$

$$\text{c) } 5x + 11 = 3x + 7$$
$$-3x \quad -3x$$

$$2x + 11 = 7$$
$$-11 \quad -11$$

$$\frac{2x}{2} = \frac{-4}{2}$$

$$\boxed{x = -2}$$