

$$\cancel{4} \times \frac{x-8}{\cancel{4}} = \underbrace{-3 \times 4}_{-12}$$

$$x-8 = -12$$

$$x = -12 + 8$$

$$x = -4$$

$$\rightarrow \frac{x-3}{2} = 3$$

$$\rightarrow \frac{x-8}{4} = -3$$

$$\cancel{12} \times \frac{3x-1}{\cancel{4}} = \frac{2x+3}{\cancel{3}} \times \cancel{12}^4$$

$$\frac{3}{4}x - \frac{1}{4} = \frac{2}{3}x + \frac{3}{3}$$

$$\frac{3}{4}x - \frac{2}{3}x - \frac{1}{4} = \frac{3}{3}$$

$$\left(\frac{3}{4} - \frac{2}{3}\right)x = \frac{3}{3} + \frac{1}{4}$$

$$\left(\frac{9}{12} - \frac{8}{12}\right)x = \frac{3}{3} + \frac{1}{4}$$

$$\left(\frac{1}{12}\right)x = \frac{12}{12} + \frac{3}{12}$$

$$\frac{1}{12}x = \frac{15}{12}$$

$$\cancel{12} \times \frac{1}{\cancel{12}}x = \frac{15}{12} \times 12$$

$$x = 15$$

$$3(3x-1) = 4(2x+3)$$

$$9x-3 = 8x+12$$

$$9x-8x-3 = 12$$

$$1x = 12+3$$

$$x = 15$$

$$\frac{3(15)-1}{4} = \frac{2(15)+3}{3}$$

$$\frac{45-1}{4} = \frac{30+3}{3}$$

$$\frac{44}{4} = \frac{33}{3}$$

$$11 = 11 \quad \checkmark$$

$$4x+3 \geq -5$$

$$4x \geq -5-3$$

$$4x \geq -8$$

$$x \geq -2$$

$$4 < 5$$

$$-4 > -5$$

0 → > or <
• → ≥ or ≤

$$3x+6 \geq 9$$

$$3x \geq 9-6$$

$$3x \geq 3$$

$$x \geq 1$$

$$8 - \frac{x}{2} > 6$$

$$-\frac{x}{2} > 6-8$$

$$-\frac{x}{2} > -2$$

$$2x - \frac{x}{2} > -2 \times 2$$

$$-1x - x > -4 \quad x < 4$$

$$5x+9 < 7x-5$$

$$9 < 7x-5x-5$$

$$9 < 2x-5$$

$$9+5 < 2x$$

$$14 < 2x$$

$$2x > 14$$

$$x > 7$$