

combine \pm terms & $\times \div$ coefficients

$$2x + 4 = 10$$

$$x + x = 6$$

$$2x + x = 9$$

$$3x + 7 = 10 - x$$

$$3x + 10 = 4x - 2$$

$$2.1x - x = 4$$

$$3.2x - 6.4 = 1.4x + 2$$

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

$$\frac{3}{2}x - \frac{1}{2}x = \frac{7}{8}$$

$$4.4x - \frac{1}{2}x = x - 2$$

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

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

$$\alpha x + 2 = 4$$

$$\frac{x - a}{2x} = 5$$

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

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

combine \pm terms & $\times\div$ coefficients

$$2x + 4 = 10$$
$$\frac{1}{2}(2x) = (6)\frac{1}{2}$$
$$x = 3$$

$$x + x = 6$$
$$\frac{1}{2}(2x) = (6)\frac{1}{2}$$
$$x = 3$$

$$2x + x = 9$$
$$\frac{2}{3}(3x) = (9)\frac{1}{3}$$
$$x = 3$$

$$3x + 7 = 10 - x$$
$$\frac{1}{4}(4x) = (3)\frac{1}{4}$$
$$x = \frac{3}{4}$$

$$3x + 10 = 4x - 2$$

$$(-1)(-x) = (-12)(-1)$$

$$x = 12$$

$$2.1x - x = 4$$

$$\frac{1}{11}(1.1x) = (4)\frac{1}{1.1}$$

$$x = \frac{40}{11} \approx 3.64$$

$$3.2x - 6.4 = 1.4x + 2$$

$$\frac{1}{1.8}(1.8x) = (8.4)\frac{1}{1.8}$$

$$x = \frac{14}{3} \approx 4.67$$

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

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

$$x = -4$$

$$\frac{3}{2}x - \frac{1}{2}x = \frac{7}{8}$$

$$\frac{2}{2}x = \frac{7}{8}$$

$$x = \frac{7}{8}$$

$$4.4x - \frac{1}{2}x = x - 2$$

$$\frac{1}{2.9}(2.9x) = (-2) \frac{1}{2.9}$$

$$x = -\frac{20}{29} = -0.69$$

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

$$\frac{6}{25}\left(\frac{29}{6}x\right) = (4) \frac{6}{25}$$

$$x = \frac{24}{29} = 0.83$$

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

$$x-1 = 4x$$

$$-3x = 1$$

$$x = -\frac{1}{3} \approx -0.33$$

$$ax^2 + 2 = 4$$

$$\frac{1}{a}(ax^2) = (2) \frac{1}{a}$$

$$x^2 = \frac{2}{a}$$

$$2x \left(\frac{x-a}{2x} \right) = (5)2x$$

$$x - a = 10x - 10x + a$$

$$-9x = a$$

$$x = -\frac{a}{9}$$

$$\alpha \left(\frac{\beta x - 4}{\alpha} \right) = (4)\alpha$$

$$\beta x - 4 = 4\alpha$$

$$\frac{1}{\beta}(\beta x) = (4\alpha + 4)\frac{1}{\beta}$$

$$x = \frac{1}{\beta}(4\alpha + 4)$$

$$(2)(3) \left(\frac{\beta - x}{2} \right) = \left(\frac{x}{3} \right) (2)(3)$$

$$3(\beta - x) = 2x$$

$$3\beta - 3x = 2x - 3\beta$$

$$-5x = -3\beta$$

$$x = \frac{3}{5}\beta$$