



1. 次の方程式を移項を解きなさい。

$$(1) 2(4 - 0.5x) + 2 = x - 2$$

$$8 - x + 2 = x - 2 \quad 2x = 12 \quad x = 6$$

$$(2) (30 + 2x - (30 - x)) - (30 + 2(30 - x) - x) = 12$$

$$30 + 2x - 30 + x - (30 + 60 - 2x - x) = 12 \quad 6x = 102 \quad x = 17$$

$$(3) \left(2(x + 8) - 3x + 3\right) + 3 = -2\left(2(x - 4) + 3(3 - x) + 5\right) + 1$$

$$2x + 16 - 3x + 3 + 3 = -2(2x - 8 + 9 - 3x + 5) + 1 \quad -x + 22 = -2(-x + 6) + 1$$

$$-x + 22 = 2x - 11 \quad 3x = 33 \quad x = 11$$

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

$$12\left(4x - \frac{6 - 3x}{6}\right) = 12\left(\frac{2x + 4}{4}\right) \quad 48x - 2(6 - 3x) = 3(2x + 4)$$

$$48x - 12 + 6x = 6x + 12 \quad 48x = 24 \quad x = \frac{1}{2}$$

$$(5) 3x - 2\left(x - \frac{1 - 2x}{2}\right) = \frac{2x - 1}{2}$$

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

$$(6) 2\left(\frac{4x + 2}{6} - x\right) - 0.5x = 0.2(3x + 1) - \frac{1}{2}x$$

$$\frac{4}{3}x + \frac{2}{3} - 2x - 0.5x = 0.6x + 0.2 - \frac{1}{2}x \quad \text{小数を分数に変換}$$

$$\frac{4}{3}x + \frac{2}{3} - 2x - \frac{1}{2}x = \frac{3}{5}x + \frac{1}{5} - \frac{1}{2}x \quad 30\left(\frac{4}{3}x + \frac{2}{3} - 2x - \frac{1}{2}x\right) = 30\left(\frac{3}{5}x + \frac{1}{5} - \frac{1}{2}x\right)$$

$$40x + 20 - 60x - 15x = 18x + 6 - 15x \quad -35x + 20 = 3x + 6 \quad 38x = 14 \quad x = \frac{7}{19}$$

(1)  $x = 6$

(2)  $x = 17$

(3)  $x = 11$

(4)  $x = \frac{1}{2}$

(5)  $x = \frac{3}{4}$

(6)  $x = \frac{7}{19}$