

問題の解き方と復習のポイント

1030301 計算 解答

1. 次の方程式を解け。

$$1) \frac{x-3}{4} - \frac{3x-5}{8} = 1 + \frac{x+4}{2} \quad \text{両辺に8を掛ける}$$

$$2x - 6 - 3x + 5 = 8 + 4x + 16$$

$$5x = -25 \quad x = -5$$

$$2) \frac{x+1}{2} - \frac{2x-1}{3} + 2 = 0 \quad \text{両辺に6を掛ける}$$

$$3(x+1) - 2(2x-1) + 12 = 0$$

$$-x = -12 - 5 \quad x = 17$$

$$3) 0.05x - 0.12 = 0.4x + 0.23 \quad \text{両辺に100を掛ける}$$

$$5x - 12 = 40x + 23$$

$$35x = -35 \quad x = -1$$

$$4) \frac{x-1}{2} + 0.75 = \frac{2x+5}{3} \quad \text{分数に直す}$$

$$\frac{x-1}{2} + \frac{3}{4} = \frac{2x+5}{3} \quad \text{両辺に12を掛ける}$$

$$6(x-1) + 9 = 4(2x+5)$$

$$6x - 6 + 9 = 8x + 20$$

$$2x = -17 \quad x = -\frac{17}{2}$$

$$5) 3 + \frac{x-1}{3} = \frac{5x+5}{12} - \frac{3-x}{4} \quad \text{両辺に12を掛ける}$$

$$36 + 4(x-1) = 5x+5 - 3(3-x)$$

$$36 + 4x - 4 = 5x+5 - 9 + 3x$$

$$4x = 36 \quad x = 9$$

$$6) \frac{4}{3}\left(x + \frac{7}{4}\right) = \frac{3}{2} - \frac{1-x}{4} \quad \text{両辺に12を掛ける}$$

$$4 \times 4 \left(x + \frac{7}{4}\right) = 6 \times 3 - 3(1-x)$$

$$16x - 28 = 18 - 3 + 3x$$

$$13x = +28 + 15 = 43 \quad x = \frac{43}{13}$$

$$7) 3x - 2\left(x - \frac{1-2x}{3}\right) = \frac{2x-1}{2} \quad \text{両辺に6を掛ける}$$

$$18x - 2 \times 6 \left(x - \frac{1-2x}{3}\right) = 3(2x-1)$$

$$18x - 12x + 4 + 8x = 6x - 3$$

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