

第44回 1次式の混合計算 演習編2

解答

⑤ 前回授業内容の訂正

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

$$= 4 \times \frac{1}{2}(3x+1) - 4 \times \frac{1}{4}(5x-3) = 2(3x+1) - (5x-3) = 6x+2-5x+3 = x+5$$

①  $\frac{1}{4}(6x-10) + \frac{1}{8}(12x-3)$

$$= \frac{6}{4}x - \frac{10}{4} + \frac{12}{8}x - \frac{3}{8} = \frac{3}{2}x + \frac{3}{2}x - \frac{5}{2} - \frac{3}{8}$$

$$= \frac{6}{2}x - \frac{20}{8} - \frac{3}{8} = 3x - \frac{23}{8}$$

②  $6\left(\frac{1}{4}x - \frac{1}{2}\right) + 4\left(\frac{x}{8} + \frac{1}{2}\right)$

$$= \frac{6}{4}x - \frac{6}{2} + \frac{4}{8}x + \frac{4}{2} = \frac{3}{2}x + \frac{1}{2}x - 3 + 2 = \frac{4}{2}x - 1 = 2x - 1$$

③  $\frac{3}{4}x + \frac{2x-3}{3} - \frac{6-5x}{2}$

$$= \frac{3}{4}x + \frac{1}{3}(2x-3) - \frac{1}{2}(6-5x) = \frac{3}{4}x + \frac{2}{3}x - \frac{3}{3} - \frac{6}{2} + \frac{5}{2}x$$

$$= \frac{9}{12}x + \frac{8}{12}x + \frac{30}{12}x - 1 - 3 = \frac{47}{12}x - 4$$

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

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

$$= \frac{4}{3}x + \frac{2}{3} - \frac{3}{2}x + 1 = \frac{8}{6}x - \frac{9}{6}x + \frac{2}{3} + \frac{3}{3}$$

$$= -\frac{1}{6}x + \frac{5}{3}$$