

舞羽と夏奈子 1次式の計算

$$1. \quad \frac{1}{6}(12a+18)+(-3a+9)$$

$$= 2a + 3 - 3a + 9 = -a + 12$$

$$2. \quad 5(x+3) - \frac{2}{3}(6x+15)$$

$$= 5x + 15 - 4x - 10 = x + 5$$

$$3. \quad \frac{2x+1}{3} \times 9 - \frac{x-4}{2} \times 6$$

$$= 3(2x+1) - 3(x-4) = 6x + 3 - 3x + 12 = 3x + 15$$

$$4. \quad x - 2 - \frac{x-5}{2}$$

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

$$5. \quad \frac{2x-5}{4} - \frac{3x-7}{6}$$

$$= \frac{3(2x-5) - 2(3x-7)}{12} = \frac{6x-15-6x+14}{12} = -\frac{1}{12}$$

$$6. \quad \frac{5x-3}{4} + \frac{-7x+1}{6}$$

$$= \frac{3(5x-3) + 2(-7x+1)}{12} = \frac{15x-9-14x+2}{12} = \frac{x-7}{12}$$

$$7. \quad 4\left(\frac{1}{2}a - \frac{3}{4}\right) - 3\left(a + \frac{1}{3}\right)$$

$$= 2a - 3 - 3a - 1 = -a - 4$$

$$8. \quad \frac{5x+3}{2} - \frac{2x-3}{3} + \frac{x-6}{6}$$

$$= \frac{3(5x+3) - 2(2x-3) + (x-6)}{6} = \frac{15x+9-4x+6+x-6}{6}$$

$$= \frac{12x+9}{6} = \frac{4x+3}{2}$$

$$9. \quad 1 - \frac{x-3}{4} + \frac{2x-1}{3}$$

$$= \frac{12 - 3(x-3) + 4(2x-1)}{12} = \frac{12 - 3x + 9 + 8x - 4}{12} = \frac{5x+17}{12}$$

$$10. \quad \frac{2x-1}{2} - \frac{x-2}{6} + \frac{x+1}{3}$$

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

$$= \frac{7x+1}{6}$$

$$11. \quad \frac{-3x+5}{3} - \frac{4x-3}{6} + x-2$$

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

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

$$12. \quad \frac{a-1}{3} + \frac{2a+1}{5} - \frac{3a-1}{6}$$

$$= \frac{10(a-1) + 6(2a+1) - 5(3a-1)}{30} = \frac{10a-10+12a+6-15a+5}{30}$$

$$= \frac{7a+1}{30}$$

$$\begin{aligned}
 13. \quad & \frac{3x-4}{2} - \frac{2(1-3x)}{3} \\
 &= \frac{3(3x-4) - 2 \times 2(1-3x)}{6} = \frac{9x-12-4+12x}{6} = \frac{21x-16}{6}
 \end{aligned}$$

$$\begin{aligned}
 14. \quad & x - \frac{x-3}{2} - \frac{2-x}{3} - \frac{1}{4} \\
 &= \frac{12x - 6(x-3) - 4(2-x) - 3}{12} = \frac{12x - 6x + 18 - 8 + 4x - 3}{12} \\
 &= \frac{10x + 7}{12}
 \end{aligned}$$

$$\begin{aligned}
 15. \quad & \frac{4x-1}{3} - \frac{6x-1}{5} - \frac{x+3}{4} \\
 &= \frac{20(4x-1) - 12(6x-1) - 15(x+3)}{60} = \frac{80x-20-72x+12-15x-45}{60} \\
 &= \frac{-7x-53}{60}
 \end{aligned}$$

$$\begin{aligned}
 16. \quad & \frac{x+2}{2} + \frac{3x-1}{3} - \frac{4-3x}{6} \\
 &= \frac{3(x+2) + 2(3x-1) - (4-3x)}{6} = \frac{3x+6+6x-2-4+3x}{6} \\
 &= \frac{12x}{6} = 2x
 \end{aligned}$$