

1次式の乗除② 解答と解説

1. **解答** (1)  $2x$  (2)  $-4a$  (3)  $-4x$  (4)  $9y$

$$\begin{aligned} (1) \quad 8x \div 4 &= \frac{8x}{4} \\ &= \frac{8 \times x}{4} \\ &= 2x \end{aligned}$$

$$\begin{aligned} (2) \quad 12a \div (-3) &= \frac{12a}{-3} \\ &= -\frac{12a}{3} \\ &= -\frac{12 \times a}{3} \\ &= -4a \end{aligned}$$

$$\begin{aligned} (3) \quad -24x \div 6 &= \frac{-24x}{6} \\ &= -\frac{24x}{6} \\ &= -\frac{24 \times x}{6} \\ &= -4x \end{aligned}$$

$$\begin{aligned} (4) \quad -18y \div (-2) &= \frac{-18y}{-2} \\ &= \frac{18y}{2} \\ &= \frac{18 \times y}{2} \\ &= 9y \end{aligned}$$

2. **解答** (1)  $x+3$  (2)  $6a-4$  (3)  $-2x+1$  (4)  $-5y-1$

$$\begin{aligned} (1) \quad (3x+9) \div 3 &= (3x+9) \times \frac{1}{3} \\ &= 3x \times \frac{1}{3} + 9 \times \frac{1}{3} \\ &= x+3 \end{aligned}$$

$$\begin{aligned} (2) \quad (12a-8) \div 2 &= (12a-8) \times \frac{1}{2} \\ &= 12a \times \frac{1}{2} - 8 \times \frac{1}{2} \\ &= 6a-4 \end{aligned}$$

$$\begin{aligned} (3) \quad (6x-3) \div (-3) &= (6x-3) \times \left(-\frac{1}{3}\right) \\ &= 6x \times \left(-\frac{1}{3}\right) - 3 \times \left(-\frac{1}{3}\right) \\ &= -2x+1 \end{aligned}$$

$$\begin{aligned} (4) \quad (20y+4) \div (-4) &= (20y+4) \times \left(-\frac{1}{4}\right) \\ &= 20y \times \left(-\frac{1}{4}\right) + 4 \times \left(-\frac{1}{4}\right) \\ &= -5y-1 \end{aligned}$$

3. **解答** (1)  $11x+3$  (2)  $-3a+17$

$$\begin{aligned} (1) \quad 3(x-1) + 2(4x+3) &= 3x-3+8x+6 \\ &= 3x+8x-3+6 \\ &= 11x+3 \end{aligned}$$

$$\begin{aligned} (2) \quad 4(3a+2) - 3(5a-3) &= 12a+8-15a+9 \\ &= 12a-15a+8+9 \\ &= -3a+17 \end{aligned}$$

4. 解答 (1) 19 (2)  $-3a-12$  (3)  $5x-5$  (4)  $-3y+8$

$$\begin{aligned}(1) \quad 5(2x+3)-2(5x-2) &= 10x+15-10x+4 \\ &= 10x-10x+15+4 \\ &= 19\end{aligned}$$

$$\begin{aligned}(2) \quad 7(3a-6)+6(-4a+5) &= 21a-42-24a+30 \\ &= 21a-24a-42+30 \\ &= -3a-12\end{aligned}$$

$$\begin{aligned}(3) \quad \frac{1}{2}(8x-4)+\frac{1}{5}(5x-15) &= 4x-2+x-3 \\ &= 4x+x-2-3 \\ &= 5x-5\end{aligned}$$

$$\begin{aligned}(4) \quad \frac{1}{2}(2y+12)-\frac{2}{3}(6y-3) &= y+6-4y+2 \\ &= y-4y+6+2 \\ &= -3y+8\end{aligned}$$