

例題1

$$\begin{aligned}
 & -2(3x - 5y) \\
 &= -2 \times 3x - 2 \times (-5y) \\
 &= -6x + 10y
 \end{aligned}$$

例題2

$$\begin{aligned}
 & (8a - 6b) \times \frac{1}{2} \\
 &= {}^4_8a \times \frac{1}{2_1} - {}^3_6b \times \frac{1}{2_1} \\
 &= 4a - 3b
 \end{aligned}$$

例題3

$$\begin{aligned}
 & 5(x - 2y) - 3(4x - y) \\
 & \underline{5 \times x + 5 \times (-2y)} - \underline{3 \times 4x - 3 \times (-y)} \\
 &= \underline{5x} - \underline{10y} - \underline{12x} + \underline{3y} \\
 &= -7x - 7y
 \end{aligned}$$

例題4

$$\begin{aligned}
 & \frac{1}{4}(3a - 2b) - \frac{1}{5}(a + 4b) \\
 &= \frac{1}{4} \times 3a + \frac{1}{4_2} \times (-2b) - \frac{1}{5} \times a + \frac{1}{5} \times 4b \\
 &= \frac{3 \times 5}{4 \times 5} a - \frac{1 \times 5}{2 \times 5} b - \frac{1 \times 4}{5 \times 4} a - \frac{4 \times 2}{5 \times 2} b \\
 &= \left(\frac{15}{20} - \frac{4}{20}\right)a + \left(-\frac{5}{10} - \frac{8}{10}\right)b
 \end{aligned}$$

例題4

$$\begin{aligned}
 & (6a - 9b) \div 3 \\
 &= \frac{6a}{\boxed{3}_1} - \frac{9b}{\boxed{3}_1} \\
 &= 2a - 3b
 \end{aligned}$$

整数

分母として分配法則!

例題5

$$\begin{aligned}
 & (4x - 5y) \div \frac{2}{3} \\
 &= (4x - 5y) \times \frac{3}{2} \\
 &= {}^2_4x \times \frac{3}{2_1} - 5y \times \frac{3}{2} \\
 &= 6x - \frac{15}{2}y
 \end{aligned}$$

分数

×逆数

$$\begin{aligned}
 & = \frac{2(3x - y) - (x - 4y)}{4} \\
 & = \frac{6x - 2y - x + 4y}{4} \\
 & = \frac{5x + 2y}{4}
 \end{aligned}$$

約分できる場合

$$\frac{\overset{3}{\cancel{6}x} + \overset{1}{\cancel{2}y}}{\cancel{4}} = \frac{3x + y}{2}$$

3つの数が同時に約分できる
ときだけ約分する!

$$\begin{aligned}
 & \frac{x}{2} - 2y - \frac{x - y}{3} \\
 &= \frac{\overset{\times 3}{x}}{2 \times 3} - \overset{\times 6}{2y} - \frac{\overset{\times 2}{x - y}}{3 \times 2} \\
 &= \frac{3x - 12y - 2(x - y)}{6} \\
 &= \frac{3x - 12y - 2x + 2y}{6} \\
 &= \frac{x - 10y}{6}
 \end{aligned}$$

通分