

# 68

## 式の加法・減法

年 組 番 名前

### ● 例題 1 ●

次の式の種類項をまとめなさい

$$\begin{aligned} &6x + 3y - 2x - 5y \\ &= 6x - 2x + 3y - 5y \\ &= (6 - 2)x + (3 - 5)y \\ &= 4x - 2y \end{aligned} \quad \rightarrow 59 \text{の例題3へ}$$

問1 次の式の種類項をまとめなさい。

$$\begin{aligned} (1) &4x + 7y - 2x - 5y \\ &= 4x - 2x + 7y - 5y \\ &= 2x + 2y \end{aligned}$$

答.  $2x + 2y$

$$\begin{aligned} (2) &a - 5b + 8 - 4a + 7b \\ &= a - 4a - 5b + 7b + 8 \\ &= -3a + 2b + 8 \end{aligned}$$

答.  $-3a + 2b + 8$

$$\begin{aligned} (3) &2x^2 + 4x^2 \\ &= (2 + 4)x^2 \\ &= 6x^2 \end{aligned}$$

答.  $6x^2$

$$\begin{aligned} (4) &x^2 + 7x + 6x^2 - x \\ &= x^2 + 6x^2 + 7x - x \\ &= 7x^2 + 6x \end{aligned}$$

答.  $7x^2 + 6x$

$$\begin{aligned} (5) &3x^2 - 8x - 4x^2 + 5x \\ &= 3x^2 - 4x^2 - 8x + 5x \\ &= -x^2 - 3x \end{aligned}$$

答.  $-x^2 - 3x$

$$\begin{aligned} (6) &\frac{2}{3}x - \frac{1}{2}y + \frac{1}{2}x + \frac{4}{3}y \\ &= \left(\frac{2}{3} + \frac{1}{2}\right)x + \left(-\frac{1}{2} + \frac{4}{3}\right)y \\ &= \left(\frac{4}{6} + \frac{3}{6}\right)x + \left(-\frac{3}{6} + \frac{8}{6}\right)y \\ &= \frac{7}{6}x + \frac{5}{6}y \end{aligned}$$

答.  $\frac{7}{6}x + \frac{5}{6}y$

### ● 例題 2 ●

次の2つの式をたしなさい。

$$\begin{aligned} &3x + 7y \quad , \quad 6x - 5y \\ &(3x + 7y) + (6x - 5y) \\ &= 3x + 7y + 6x - 5y \\ &= 9x + 2y \end{aligned} \quad \rightarrow 61 \text{の例題1へ}$$

問2 次の2つの式をたしなさい。

$$\begin{aligned} (1) &2x - 8y \quad , \quad 5x + 6y \\ &= (2x - 8y) + (5x + 6y) \\ &= 2x - 8y + 5x + 6y \\ &= 2x + 5x - 8y + 6y \\ &= 7x - 2y \end{aligned}$$

答.  $7x - 2y$

$$\begin{aligned} (2) &x^2 + 7x \quad , \quad 3x^2 - 6x \\ &= (x^2 + 7x) + (3x^2 - 6x) \\ &= x^2 + 7x + 3x^2 - 6x \\ &= x^2 + 3x^2 + 7x - 6x \\ &= 4x^2 + x \end{aligned}$$

答.  $4x^2 + x$

$$\begin{aligned} (3) &-5x - 9y \quad , \quad x + 6y \\ &= (-5x - 9y) + (x + 6y) \\ &= -5x - 9y + x + 6y \\ &= -5x + x - 9y + 6y \\ &= -4x - 3y \end{aligned}$$

答.  $-4x - 3y$

問3 次の式を計算しなさい。

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

答.  $-2x^2 + 6x$

$$\begin{aligned} (2) &(-3x + 2y) + (x - 9y + 3) \\ &= -3x + 2y + x - 9y + 3 \\ &= -3x + x + 2y - 9y + 3 \\ &= -2x - 7y + 3 \end{aligned}$$

答.  $-2x - 7y + 3$