

## 同類項の計算 4 解答編

I.

$$\begin{aligned} \textcircled{1} \quad & \frac{3x+5}{4} \times 12 \\ &= (3x+5) \times 3 \\ &= 9x+15 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & \frac{2x-1}{3} \times 6 \\ &= (2x-1) \times 2 \\ &= 4x-2 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & \frac{-x+7}{5} \times 20 \\ &= (-x+7) \times 4 \\ &= -4x+28 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & 14 \times \frac{2x-1}{7} \\ &= 2 \times (2x-1) \\ &= 4x-2 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & \frac{2x-5}{3} \times (-12) \\ &= (2x-5) \times (-4) \\ &= -8x+20 \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & \frac{-x-1}{2} \times (-12) \\ &= (-x-1) \times (-6) \\ &= 6x+6 \end{aligned}$$

## 同類項の計算 5

## 解答編

I.

$$\begin{aligned} \textcircled{1} \quad & (2x-4) + (5x-2) \\ &= 2x-4 + 5x-2 \\ &= 7x-6 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & (5x-9) + (x+1) \\ &= 5x-9 + x+1 \\ &= 6x-8 \end{aligned}$$

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

$$\begin{aligned} \textcircled{4} \quad & (4a-3) + (4a+3) \\ &= 4a-3 + 4a+3 \\ &= 8a \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & (8x-2) - (6x-8) \\ &= 8x-2 - 6x+8 \\ &= 2x+6 \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & (b-1) - (3b-1) \\ &= b-1 - 3b+1 \\ &= -2b \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & (7y+4) - (5y-4) \\ &= 7y+4 - 5y+4 \\ &= 2y+8 \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & (5a-1) - (a-6) \\ &= 5a-1 - a+6 \\ &= 4a+5 \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad & -(9x+1) + (9x+2) \\ &= -9x-1 + 9x+2 \\ &= 1 \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad & (-6a-6) + (-4a+19) \\ &= -6a-6 - 4a+19 \\ &= -10a+13 \end{aligned}$$

## 同類項の計算 5 - 2

## 解答編

II

$$\begin{aligned} \textcircled{1} \quad & 3a + (2a-5) \\ &= 3a + 2a - 5 \\ &= 5a - 5 \end{aligned}$$

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

$$\begin{aligned} \textcircled{3} \quad & (4a+3b) + (2a-4b) \\ &= 4a+3b + 2a-4b \\ &= 6a - b \end{aligned}$$

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

$$\begin{aligned} \textcircled{5} \quad & (8x-2) - (6x-2) \\ &= 8x-2 - 6x+2 \\ &= 2x \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & (2b-1) - (3b-1) \\ &= 2b-1 - 3b+1 \\ &= -b \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & (7y+4) - (-6y-4) \\ &= 7y+4 + 6y+4 \\ &= 13y+8 \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & (3a-1) - (-a-7) \\ &= 3a-1 + a+7 \\ &= 4a+6 \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad & -(8x+1) + (9x+2) \\ &= -8x-1 + 9x+2 \\ &= x+1 \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad & -(-6a-6) + (-4a-9) \\ &= 6a+6 - 4a-9 \\ &= 2a-3 \end{aligned}$$

(Pr.No.2125-3-A)

同類項の計算 5 - 3  
解答編

Ⅲ.

$$\begin{aligned} \textcircled{1} \quad & 2(3a+4) + 5(6a+7) \\ &= 6a+8 + 30a+35 \\ &= 36a+43 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & 3(a-2) + 5(a-4) \\ &= 3a-6 + 5a-20 \\ &= 8a-26 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & 3(a+2) - 2(a+2) \\ &= 3a+6 - 2a-4 \\ &= a+2 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & 3(x-4) - 4(x-6) \\ &= 3x-12 - 4x+24 \\ &= -x+12 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & 9(2x+y) - 3(x+2y) \\ &= 18x+9y - 3x-6y \\ &= 15x+3y \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & -4(b+1) + 3(2-b) \\ &= -4b-4 + 6-3b \\ &= -7b+2 \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & -8(-2x-4) - 8(x-4) \\ &= 16x+32 - 8x+32 \\ &= 8x+64 \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & 7(-x+1) - (6x+6) \\ &= -7x+7 - 6x-6 \\ &= -13x+1 \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad & 2(1-b) - 3(1-b) \\ &= 2-2b - 3+3b \\ &= b-1 \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad & 4(x+5) - 5(4x-1) \\ &= 4x+20 - 20x+5 \\ &= -16x+25 \end{aligned}$$

(Pr.No.2125-4-A)

同類項の計算 5 - 4  
解答編

Ⅳ

$$\begin{aligned} \textcircled{1} \quad & 4x - (3x-10) \\ &= 4x - 3x+10 \\ &= x+10 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & -6a - (-2-a) \\ &= -6a + 2+a \\ &= -5a+2 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & 3x-5-4x+6+2x \\ &= x+1 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & y-9+8-3y+y \\ &= -y-1 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & -5(-a-4) \\ &= 5a+20 \end{aligned}$$

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

$$\begin{aligned} \textcircled{7} \quad & 2(-x-5) - (3x-9) \\ &= -2x-10 - 3x+9 \\ &= -5x-1 \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & -(x-1) - (x-1) \\ &= -x+1 - x+1 \\ &= -2x+2 \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad & 4(a+b) - 4(b-a) \\ &= 4a+4b - 4b+4a \\ &= 8a \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad & -2(6-3x) - 3(2x-4) \\ &= -12+6x - 6x+12 \\ &= 0 \end{aligned}$$

(Pr.No.2125-5-A)

同類項の計算 5 - 5  
解答編

Ⅴ.

$$\begin{aligned} \textcircled{1} \quad & (2x+3) + (-3x-5) \\ &= 2x+3 - 3x-5 \\ &= -x-2 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & (2x+3y) + (3y-2x) \\ &= 2x+3y + 3y-2x \\ &= 6y \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & 3x - (3x+4y) \\ &= 3x - 3x-4y \\ &= -4y \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & (-6a+5b) + (-9a-2b) \\ &= -6a+5b - 9a-2b \\ &= -15a+3b \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & -(x-1) - 2x+5 \\ &= -x+1 - 2x+5 \\ &= -3x+6 \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & 7x - (2x-3y) + (2x+2y) \\ &= 7x-2x+3y + 2x+2y \\ &= 7x+5y \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & 5a - (3b-a) - (3b-4a) \\ &= 5a - 3b+a - 3b+4a \\ &= 10a-6b \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & (2x+3y) + (-3y-2x) \\ &= 2x+3y - 3y-2x \\ &= 0 \end{aligned}$$

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

$$\begin{aligned} \textcircled{10} \quad & 5a - (3b-a) - b - (3b-4a) \\ &= 5a - 3b+a - b - 3b+4a \\ &= 10a-7b \end{aligned}$$