

1 次の式と同類項をまとめて計算しなさい。

① $-3x - 6x$

② $2y - 5y$

③ $-8xy + 12xy$

④ $6ab + 9ab$

⑤ $-15x^2 - 7x^2$

⑥ $-10y^2 + 12y^2$

⑦ $-6x - 9y + 3x - 7y$

⑧ $-12a - 5b + 8a - 9b$

⑨ $-4x^2 - 12x + 2x^2 - 5x$

⑩ $-8y^2 - 5y + 2y - 7y^2$

⑪ $\frac{3}{4}x - \frac{1}{2}y - \frac{4}{7}x + \frac{5}{6}y$

⑫ $-\frac{1}{3}x^2 - \frac{3}{4}x - \frac{1}{6}x + \frac{5}{8}x^2$

1 次の式と同類項をまとめて計算しなさい。

$$\begin{aligned} \textcircled{1} \quad & -3x - 6x \\ & = (-3 - 6)x \\ & = -9x \end{aligned}$$

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

$$\begin{aligned} \textcircled{3} \quad & -8xy + 12xy \\ & = (-8 + 12)xy \\ & = 4xy \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & 6ab + 9ab \\ & = (6 + 9)ab \\ & = 15ab \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & -15x^2 - 7x^2 \\ & = (-15 - 7)x^2 \\ & = -22x^2 \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & -10y^2 + 12y^2 \\ & = (-10 + 12)y^2 \\ & = 2y^2 \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & -6x - 9y + 3x - 7y \\ & = (-6 + 3)x + (-9 - 7)y \\ & = -3x - 16y \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & -12a - 5b + 8a - 9b \\ & = (-12 + 8)a + (-5 - 9)b \\ & = -4a - 14b \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad & -4x^2 - 12x + 2x^2 - 5x \\ & = (-4 + 2)x^2 + (-12 - 5)x \\ & = -2x^2 - 17x \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad & -8y^2 - 5y + 2y - 7y^2 \\ & = (-8 - 7)y^2 + (-5 + 2)y \\ & = -15y^2 - 3y \end{aligned}$$

$$\begin{aligned} \textcircled{11} \quad & \frac{3}{4}x - \frac{1}{2}y - \frac{4}{7}x + \frac{5}{6}y \\ & = \left(\frac{3}{4} - \frac{4}{7}\right)x + \left(-\frac{1}{2} + \frac{5}{6}\right)y \\ & = \left(\frac{21}{28} - \frac{16}{28}\right)x + \left(-\frac{3}{6} + \frac{5}{6}\right)y \\ & = \frac{5}{28}x + \frac{2}{6}y \\ & = \frac{5}{28}x + \frac{1}{3}y \end{aligned}$$

$$\begin{aligned} \textcircled{12} \quad & -\frac{1}{3}x^2 - \frac{3}{4}x - \frac{1}{6}x + \frac{5}{8}x^2 \\ & = \left(-\frac{1}{3} + \frac{5}{8}\right)x^2 + \left(-\frac{3}{4} - \frac{1}{6}\right)x \\ & = \left(-\frac{8}{24} + \frac{15}{24}\right)x^2 + \left(-\frac{9}{12} - \frac{2}{12}\right)x \\ & = \frac{7}{24}x^2 - \frac{11}{12}x \end{aligned}$$