

1 次の式と同類項をまとめて計算しなさい。

① $8x + 9x$

② $-3y + 6y$

③ $2xy + 8xy$

④ $6ab - 2ab$

⑤ $4x^2 - 9x^2$

⑥ $-7y^2 + 9y^2$

⑦ $-6x - 9y + 8x - 2y$

⑧ $-5a - 6b + 3a - 9b$

⑨ $-7x^2 - 4x + 5x^2 - 8x$

⑩ $-2y^2 - 6y + y - 4y^2$

⑪ $\frac{1}{2}x - \frac{1}{4}y - \frac{1}{8}x + \frac{1}{5}y$

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

1 次の式と同類項をまとめて計算しなさい。

$$\begin{aligned} \textcircled{1} \quad & 8x + 9x \\ &= (8 + 9)x \\ &= 17x \end{aligned}$$

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

$$\begin{aligned} \textcircled{3} \quad & 2xy + 8xy \\ &= (2 + 8)xy \\ &= 10xy \end{aligned}$$

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

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

$$\begin{aligned} \textcircled{6} \quad & -7y^2 + 9y^2 \\ &= (-7 + 9)y^2 \\ &= 2y^2 \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & -6x - 9y + 8x - 2y \\ &= (-6 + 8)x + (-9 - 2)y \\ &= 2x - 11y \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & -5a - 6b + 3a - 9b \\ &= (-5 + 3)a + (-6 - 9)b \\ &= -2a - 15b \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad & -7x^2 - 4x + 5x^2 - 8x \\ &= (-7 + 5)x^2 + (-4 - 8)x \\ &= -2x^2 - 12x \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad & -2y^2 - 6y + y - 4y^2 \\ &= (-2 - 4)y^2 + (-6 + 1)y \\ &= -6y^2 - 5y \end{aligned}$$

$$\begin{aligned} \textcircled{11} \quad & \frac{1}{2}x - \frac{1}{4}y - \frac{1}{8}x + \frac{1}{5}y \\ &= \left(\frac{1}{2} - \frac{1}{8}\right)x + \left(-\frac{1}{4} + \frac{1}{5}\right)y \\ &= \left(\frac{4}{8} - \frac{1}{8}\right)x + \left(-\frac{5}{20} + \frac{4}{20}\right)y \\ &= \frac{3}{8}x - \frac{1}{20}y \end{aligned}$$

$$\begin{aligned} \textcircled{12} \quad & -\frac{1}{6}x^2 - \frac{1}{2}x - \frac{2}{3}x + \frac{3}{5}x^2 \\ &= \left(-\frac{1}{6} + \frac{3}{5}\right)x^2 + \left(-\frac{1}{2} - \frac{2}{3}\right)x \\ &= \left(-\frac{5}{30} + \frac{18}{30}\right)x^2 + \left(-\frac{3}{6} - \frac{4}{6}\right)x \\ &= \frac{13}{30}x^2 - \frac{7}{6}x \end{aligned}$$