

同類項 …文字の部分がまったく同じである項を同類項という。

$4x, -9x \rightarrow$ **同類項**

$4x, -9x^2 \rightarrow$ **同類項ではない**

$xy, -2xy \rightarrow$ **同類項**

$xy, -2xy^2 \rightarrow$ **同類項ではない**

例題 1

$$\begin{array}{cccc} & \text{同類項} & & \\ & \swarrow & \searrow & \\ -2x & +5 & -3x & -6 \\ & \swarrow & \searrow & \\ & \text{同類項} & & \end{array}$$

$$= (-2-3)x + 5 - 6$$

$$= -5x - 1$$

例題 2

$$\begin{array}{cccc} & \text{同類項} & & \\ & \swarrow & \searrow & \\ -x & +7y & +2x & -3y \\ -1x & & & \\ & \swarrow & \searrow & \\ & \text{同類項} & & \end{array}$$

$$= (-1+2)x + (+7-3)y$$

$$= x + 4y$$

()の前は+
にしておく

例題 3

$$\begin{array}{cccc} & \text{同類項} & & \\ & \swarrow & \searrow & \\ 6x & +x^2 & -2 & -3x^2 & -x \\ & \swarrow & \searrow & & \\ & 1x^2 & & & -1x \\ & \swarrow & \searrow & & \\ & \text{同類項} & & & \end{array}$$

$$= (1-3)x^2 + (6-1)x - 2$$

$$= -2x^2 + 5x - 2$$

例題 4

$$\begin{array}{cccc} & \text{同類項} & & \\ & \swarrow & \searrow & \\ ab & +a & +3ab & -5a \\ 1ab & 1a & & \\ & \swarrow & \searrow & \\ & \text{同類項} & & \end{array}$$

$$= (1+3)ab + (1-5)a$$

$$= 4ab - 4a$$

例題 5

$$\begin{array}{cccc} & \text{同類項} & & \text{同類項} \\ & \swarrow & \searrow & \swarrow & \searrow \\ -x^2y & +0.7x^2y & -2xy^2 & +0.3xy^2 \\ -1x^2y & & & \\ \begin{array}{|c|} \hline -1.0 \\ \hline \end{array} & & \begin{array}{|c|} \hline -2.0 \\ \hline \end{array} & \\ \downarrow & & \downarrow & \\ = (-1+0.7)x^2y & + & (-2+0.3)xy^2 \\ = -0.3x^2y & - & 1.7xy^2 \end{array}$$

例題 6

$$\begin{array}{cccc} & \text{同類項} & & \\ & \swarrow & \searrow & \\ \frac{x}{3} & -2y & +x & +\frac{4}{3}y \\ & \swarrow & \searrow & \\ & 1x & & \\ & \swarrow & \searrow & \\ & \text{同類項} & & \end{array}$$

$$= (\frac{1}{3}+1)x + (-2+\frac{4}{3})y$$

$$= (\frac{1}{3}+\frac{3}{3})x + (-\frac{6}{3}+\frac{4}{3})y$$

$$= \frac{4}{3}x - \frac{2}{3}y$$

小数の加法・減法は必ず
小数点をそろえて計算!

$$\begin{array}{r} -1.0 \\ +0.7 \\ \hline -0.3 \end{array} \qquad \begin{array}{r} -2.0 \\ +0.3 \\ \hline -1.7 \end{array}$$

整数の分数のなおし方

$$1 = \frac{2}{2} = \frac{3}{3} = \frac{4}{4} = \frac{5}{5}$$

$$2 = \frac{2}{1} = \frac{4}{2} = \frac{6}{3} = \frac{8}{4}$$