

# 【中2数学 | 連立方程式】

1、次の連立方程式を解きなさい。

$$\square(1) \begin{cases} 0.7x - 0.3y = 1.5 & \dots \textcircled{1} \\ x - y = 1 & \dots \textcircled{2} \end{cases}$$

① × 10 - ② × 3 ぶり

$$4x = 12 \quad \therefore x = 3$$

② に代入

$$3 - y = 1 \quad \therefore y = 2$$

$\therefore x = 3, y = 2$

$$\square(2) \begin{cases} -x + 2y = 5 & \dots \textcircled{1} \\ 0.3x + 1.4y = 0.5 & \dots \textcircled{2} \end{cases}$$

① × 3 + ② × 10 ぶり

$$20y = 20 \quad \therefore y = 1$$

① に代入

$$-x + 2 = 5 \quad \therefore x = -3$$

$\therefore x = -3, y = 1$

$$\square(3) \begin{cases} 0.12x - 0.02y = 0.3 & \dots \textcircled{1} \\ 4x + 3y = -1 & \dots \textcircled{2} \end{cases}$$

① × 100 - ② × 3 ぶり

$$-11y = 33 \quad \therefore y = -3$$

② に代入

$$4x - 9 = -1$$

$$4x = 8 \quad \therefore x = 2$$

$\therefore x = 2, y = -3$

$$\square(4) \begin{cases} 0.08x + 0.17y = 1 & \dots \textcircled{1} \\ 2x - y = 4 & \dots \textcircled{2} \end{cases}$$

① × 100 - ② × 4 ぶり

$$21y = 84 \quad \therefore y = 4$$

② に代入

$$2x - 4 = 4$$

$$2x = 8 \quad \therefore x = 4$$

$\therefore x = 4, y = 4$

$$\square(5) \begin{cases} 0.5x + y = -2 & \dots \textcircled{1} \\ 0.2x - 0.7y = 0.3 & \dots \textcircled{2} \end{cases}$$

①, ② の両辺を 10 倍する

$$\begin{cases} 5x + 10y = -20 & \dots \textcircled{1}' \\ 2x - 7y = 3 & \dots \textcircled{2}' \end{cases}$$

①' × 2 - ②' × 5 ぶり

$$55y = -55 \quad \therefore y = -1$$

②' に代入

$$2x + 7 = 3 \quad \therefore x = -2 \quad \therefore x = -2, y = -1$$

$$\square(6) \begin{cases} 0.5x + 0.3y = 1 & \dots \textcircled{1} \\ 3x - 0.2y = -4 & \dots \textcircled{2} \end{cases}$$

①, ② の両辺を 10 倍する

$$\begin{cases} 5x + 3y = 10 & \dots \textcircled{1}' \\ 30x - 2y = -40 & \dots \textcircled{2}' \end{cases}$$

①' × 2 + ②' × 3 ぶり

$$100x = -100 \quad \therefore x = -1$$

①' に代入  $-5 + 3y = 10 \quad \therefore y = 5$