

代入法.2

名前

解答

解答

問 次の連立方程式を代入法で解け。

$$(1) \begin{cases} x + y = 11 \\ x - y = 7 \end{cases}$$

$$x + y = 11 \rightarrow x = 11 - y$$

$$x = 11 - y \text{ を } x - y = 7 \text{ に代入}$$

$$11 - y - y = 7$$

$$-2y = -4$$

$$y = 2$$

$$y = 2 \text{ を } x - y = 7 \text{ に代入}$$

$$x - 2 = 7$$

$$x = 9$$

$$\text{答え} \quad \begin{cases} x = 9 \\ y = 2 \end{cases}$$

$$(2) \begin{cases} x + y = 3 \\ 2x - y = 12 \end{cases}$$

$$x + y = 3 \rightarrow x = 3 - y$$

$$x = 3 - y \text{ を } 2x - y = 12 \text{ に代入}$$

$$2(3 - y) - y = 12$$

$$6 - 3y = 12$$

$$-3y = 6$$

$$y = -2$$

$$y = -2 \text{ を } x + y = 3 \text{ に代入}$$

$$x - 2 = 3$$

$$x = 5$$

$$\text{答え} \quad \begin{cases} x = 5 \\ y = -2 \end{cases}$$

$$(3) \begin{cases} x + 10y = -6 \\ 2x - y = -5.7 \end{cases}$$

$$x + 10y = -6 \rightarrow x = -6 - 10y$$

$$x = -6 - 10y \text{ を } 2x - y = -5.7 \text{ に代入}$$

$$2(-6 - 10y) - y = -5.7$$

$$-12 - 20y - y = -5.7$$

$$-21y = 6.3$$

$$y = -0.3$$

$$y = -0.3 \text{ を } 2x - y = -5.7 \text{ に代入}$$

$$2x - (-0.3) = -5.7$$

$$2x = -6$$

$$x = -3$$

$$\text{答え} \quad \begin{cases} x = -3 \\ y = -0.3 \end{cases}$$

$$(4) \begin{cases} x + y = 8 \\ 3x - 2y = -11 \end{cases}$$

$$x + y = 8 \rightarrow x = 8 - y$$

$$x = 8 - y \text{ を } 3x - 2y = -11 \text{ に代入}$$

$$3(8 - y) - 2y = -11$$

$$24 - 3y - 2y = -11$$

$$-5y = -35$$

$$y = 7$$

$$y = 7 \text{ を } x + y = 8 \text{ に代入}$$

$$x + 7 = 8$$

$$x = 1$$

$$\text{答え} \quad \begin{cases} x = 1 \\ y = 7 \end{cases}$$

