

数学科 方程式マスター F-②

( )組( )番 名前( )

次の方程式を解きなさい。

①  $-\frac{4}{3}x+1=\frac{1}{6}$

⑤  $\frac{7}{2}x+1=-\frac{4}{5}$

②  $2x+\frac{3}{7}=\frac{4}{7}$

⑥  $2x-\frac{3}{4}=-\frac{1}{6}$

③  $\frac{3}{4}x-\frac{5}{3}=-1$

⑦  $-\frac{7}{6}x-\frac{5}{6}=-\frac{7}{4}$

④  $-\frac{5}{6}x-\frac{1}{2}=-\frac{3}{2}$

次の方程式を解きなさい。

$$\begin{aligned} \textcircled{1} \quad & -\frac{4}{3}x + 1 = \frac{1}{6} \\ & 6\left(-\frac{4}{3}x + 1\right) = 6 \times \frac{1}{6} \\ & 2x\left(-\frac{4}{3}x\right) + 6 = 1 \\ & -8x + 6 = 1 \\ & -8x = 1 - 6 \\ & -8x = -5 \end{aligned} \quad \rightarrow \quad \begin{aligned} & -8x \div (-8) = -5 \div (-8) \\ & x = \frac{5}{8} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & 2x + \frac{3}{7} = \frac{4}{7} \\ & 7\left(2x + \frac{3}{7}\right) = 7 \times \frac{4}{7} \\ & 14x + 7 \times \frac{3}{7} = 4 \\ & 14x + 3 = 4 \\ & 14x = 4 - 3 \\ & 14x = 1 \end{aligned} \quad \rightarrow \quad \begin{aligned} & 14x \div 14 = 1 \div 14 \\ & x = \frac{1}{14} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & \frac{3}{4}x - \frac{5}{3} = -1 \\ & 12\left(\frac{3}{4}x - \frac{5}{3}\right) = 12 \times (-1) \\ & 3x + 12 \times \left(-\frac{5}{3}\right) = -12 \\ & 9x - 20 = -12 \\ & 9x = -12 + 20 \\ & 9x = 8 \end{aligned} \quad \rightarrow \quad \begin{aligned} & 9x \div 9 = 8 \div 9 \\ & x = \frac{8}{9} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & -\frac{5}{6}x - \frac{1}{2} = -\frac{3}{2} \\ & 6\left(-\frac{5}{6}x - \frac{1}{2}\right) = 6 \times \left(-\frac{3}{2}\right) \\ & 6 \times \left(-\frac{5}{6}x\right) + 6 \times \left(-\frac{1}{2}\right) = -9 \\ & -5x - 3 = -9 \\ & -5x = -9 + 3 \\ & -5x = -6 \end{aligned} \quad \rightarrow \quad \begin{aligned} & -5x \div (-5) = -6 \div (-5) \\ & x = \frac{6}{5} \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & \frac{7}{2}x + 1 = -\frac{4}{5} \\ & 10\left(\frac{7}{2}x + 1\right) = 10 \times \left(-\frac{4}{5}\right) \\ & 5 \times \frac{7}{2}x + 10 = -8 \\ & 35x + 10 = -8 \\ & 35x = -8 - 10 \\ & 35x = -18 \end{aligned} \quad \rightarrow \quad \begin{aligned} & 35x \div 35 = -18 \div 35 \\ & x = -\frac{18}{35} \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & 2x - \frac{3}{4} = -\frac{1}{6} \\ & 12\left(2x - \frac{3}{4}\right) = 12 \times \left(-\frac{1}{6}\right) \\ & 24x + 12 \times \left(-\frac{3}{4}\right) = -2 \\ & 24x - 9 = -2 \\ & 24x = -2 + 9 \\ & 24x = 7 \end{aligned} \quad \rightarrow \quad \begin{aligned} & 24x \div 24 = 7 \div 24 \\ & x = \frac{7}{24} \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & -\frac{7}{6}x - \frac{5}{6} = -\frac{7}{4} \\ & 12\left(-\frac{7}{6}x - \frac{5}{6}\right) = 12 \times \left(-\frac{7}{4}\right) \\ & 2 \times \left(-\frac{7}{6}x\right) + 2 \times \left(-\frac{5}{6}\right) = -21 \\ & -14x - 10 = -21 \\ & -14x = -21 + 10 \\ & -14x = -11 \\ & -14x \div (-14) = -11 \div (-14) \\ & x = \frac{11}{14} \end{aligned}$$