

得 点		<b>演習問題</b>	実施 日	月	日	氏 名	
				方程式の解き方 ③			

【1】次の方程式を解きなさい。

①  $7x = 5x - 12$

②  $3x + 1 = 5x + 9$

③  $x + 3 = 6x - 2x + 6$

④  $4x - (x - 3) = 15$

⑤  $3(x - 2) = 5x - 6$

⑥  $8 - 5(1 - x) = 13$

⑦  $4x - 3 = 2(x + 3) + 1$

⑧  $3(x - 1) - 2(x - 5) = 1$

【2】次の方程式を解きなさい。

①  $0.7x - 2 = 0.3x - 0.8$

②  $0.05x = 0.08x - 0.15$

③  $\frac{x}{3} + 1 = \frac{x}{4} + 2$

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

⑤  $\frac{x+3}{2} - \frac{x-3}{5} = 0$

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

得点		<b>演習問題〔解答〕</b>	実施日	月	日	氏名
				方程式の解き方 ③		

【1】次の方程式を解きなさい。

①  $7x = 5x - 12$

$$\begin{aligned} 7x - 5x &= -12 \\ 2x &= -12 \\ \underline{x} &= \underline{-6} \end{aligned}$$

②  $3x + 1 = 5x + 9$

$$\begin{aligned} 3x - 5x &= 9 - 1 \\ -2x &= 8 \\ \underline{x} &= \underline{-4} \end{aligned}$$

③  $x + 3 = 6x - 2x + 6$

$$\begin{aligned} x - 6x + 2x &= 6 - 3 \\ -3x &= 3 \\ \underline{x} &= \underline{-1} \end{aligned}$$

④  $4x - (x - 3) = 15$

$$\begin{aligned} 4x - x + 3 &= 15 \\ 4x - x &= 15 - 3 \\ 3x &= 12 \\ \underline{x} &= \underline{4} \end{aligned}$$

⑤  $3(x - 2) = 5x - 6$

$$\begin{aligned} 3x - 6 &= 5x - 6 \\ 3x - 5x &= -6 + 6 \\ -2x &= 0 \\ \underline{x} &= \underline{0} \end{aligned}$$

⑥  $8 - 5(1 - x) = 13$

$$\begin{aligned} 8 - 5 + 5x &= 13 \\ 5x &= 13 - 8 + 5 \\ 5x &= 10 \\ \underline{x} &= \underline{2} \end{aligned}$$

⑦  $4x - 3 = 2(x + 3) + 1$

$$\begin{aligned} 4x - 3 &= 2x + 6 + 1 \\ 4x - 2x &= 6 + 1 + 3 \\ 2x &= 10 \\ \underline{x} &= \underline{5} \end{aligned}$$

⑧  $3(x - 1) - 2(x - 5) = 1$

$$\begin{aligned} 3x - 3 - 2x + 10 &= 1 \\ 3x - 2x &= 1 + 3 - 10 \\ \underline{x} &= \underline{-6} \end{aligned}$$

【2】次の方程式を解きなさい。

①  $0.7x - 2 = 0.3x - 0.8$

$$\begin{aligned} 7x - 20 &= 3x - 8 \\ 7x - 3x &= -8 + 20 \\ 4x &= 12 \\ \underline{x} &= \underline{3} \end{aligned}$$

②  $0.05x = 0.08x - 0.15$

$$\begin{aligned} 5x &= 8x - 15 \\ 5x - 8x &= -15 \\ -3x &= -15 \\ \underline{x} &= \underline{5} \end{aligned}$$

③  $\frac{x}{3} + 1 = \frac{x}{4} + 2$

$$\begin{aligned} \frac{x}{3} \times 12 + 1 \times 12 &= \frac{x}{4} \times 12 + 2 \times 12 \\ 4x + 12 &= 3x + 24 \\ 4x - 3x &= 24 - 12 \\ \underline{x} &= \underline{12} \end{aligned}$$

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

$$\begin{aligned} \frac{1}{3}x \times 6 - \frac{1}{2} \times 6 &= \frac{3}{2}x \times 6 - 4 \times 6 \\ 2x - 3 &= 9x - 24 \\ 2x - 9x &= -24 + 3 \\ -7x &= -21 \\ \underline{x} &= \underline{3} \end{aligned}$$

⑤  $\frac{x+3}{2} - \frac{x-3}{5} = 0$

$$\begin{aligned} \frac{x+3}{2} \times 10 - \frac{x-3}{5} \times 10 &= 0 \\ 5(x+3) - 2(x-3) &= 0 \\ 5x + 15 - 2x + 6 &= 0 \\ 5x - 2x &= -15 - 6 \\ 3x &= -21 \\ \underline{x} &= \underline{-7} \end{aligned}$$

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

$$\begin{aligned} \frac{x-3}{6} \times 6 + \frac{2x-1}{3} \times 6 &= 5 \times 6 \\ (x-3) + 2(2x-1) &= 30 \\ x - 3 + 4x - 2 &= 30 \\ x + 4x &= 30 + 3 + 2 \\ 5x &= 35 \\ \underline{x} &= \underline{7} \end{aligned}$$