

方程式の計算（移項）

例題 次の方程式を解け。

(1) $4x + 8 = -12$

答

(2) $3x - 7 = -4$

答

(3) $-6 - x = 6$

答

練習A 次の方程式を解け。

(1) $6x - 10 = 8$

答

(4) $-8x - 5 = 7$

答

(7) $12 + 4x = 12$

答

(2) $9x + 2 = -7$

答

(5) $24 - 6x = 0$

答

(8) $-5x - 12 = 3$

答

(3) $-x - 4 = 4$

答

(6) $18 - x = 11$

答

(9) $-7 - x = 7$

答

練習B 次の方程式を解け。

(1) $5x + 9 = -6$

答

(5) $9 - 12x = 15$

答

(9) $x + 13 = 13$

答

(2) $4x + 3 = -5$

答

(6) $-30 + 6x = 0$

答

(10) $3x - 15 = -16$

答

(3) $-8x + 8 = 0$

答

(7) $8 + 2x = 9$

答

(11) $24 - 2x = 5$

答

(4) $7 - 9x = 4$

答

(8) $18 - 24x = 0$

答

(12) $-6x - 5 = -14$

答

方程式の計算（移項）

例題 次の方程式を解け。

(1) $4x + 8 = -12$

$$\begin{aligned} \star \\ 4x &= -12 - 8 \\ 4x &= -20 \\ \frac{1}{4} \cancel{4}x &= \frac{-20}{\cancel{4}_1} \\ x &= -5 \end{aligned}$$

答 $x = -5$

(2) $3x - 7 = -4$

$$\begin{aligned} \star \\ 3x &= -4 + 7 \\ 3x &= 3 \\ \frac{1}{3} \cancel{3}x &= \frac{3}{\cancel{3}_1} \\ x &= 1 \end{aligned}$$

答 $x = 1$

(3) $-6 - x = 6$

$$\begin{aligned} \star \\ -x &= 6 + 6 \\ -x &= 12 \\ x &= -12 \end{aligned}$$

答 $x = -12$

練習A 次の方程式を解け。

(1) $6x - 10 = 8$

$$\begin{aligned} \star \\ 6x &= 8 + 10 \\ 6x &= 18 \\ \frac{1}{6} \cancel{6}x &= \frac{18}{\cancel{6}_1} \\ x &= 3 \end{aligned}$$

答 $x = 3$

(4) $-8x - 5 = 7$

$$\begin{aligned} \star \\ -8x &= 5 + 15 \\ -8x &= 12 \\ \frac{-1}{-8} \cancel{8}x &= \frac{12}{\cancel{-8}_2} \\ x &= -\frac{3}{2} \end{aligned}$$

答 $x = -\frac{3}{2}$

(7) $12 + 4x = 12$

$$\begin{aligned} \star \\ 4x &= 12 - 12 \\ 4x &= 0 \\ \frac{1}{4} \cancel{4}x &= \frac{0}{\cancel{4}_1} \\ x &= 0 \end{aligned}$$

答 $x = 0$

(2) $9x + 2 = -7$

$$\begin{aligned} \star \\ 9x &= -7 - 2 \\ 9x &= -9 \\ \frac{1}{9} \cancel{9}x &= \frac{-9}{\cancel{9}_1} \\ x &= -1 \end{aligned}$$

答 $x = -1$

(5) $24 - 6x = 0$

$$\begin{aligned} \star \\ -6x &= -24 \\ \frac{-1}{-6} \cancel{6}x &= \frac{-24}{\cancel{-6}_1} \\ x &= 4 \end{aligned}$$

答 $x = 4$

(8) $-5x - 12 = 3$

$$\begin{aligned} \star \\ -5x &= 3 + 12 \\ -5x &= 15 \\ \frac{-1}{-5} \cancel{5}x &= \frac{15}{\cancel{-5}_1} \\ x &= -3 \end{aligned}$$

答 $x = -3$

(3) $-x - 4 = 4$

$$\begin{aligned} \star \\ -x &= 4 + 4 \\ -x &= 8 \\ x &= -8 \end{aligned}$$

答 $x = -8$

(6) $18 - x = 11$

$$\begin{aligned} \star \\ -x &= 11 - 18 \\ -x &= -7 \\ x &= 7 \end{aligned}$$

答 $x = 7$

(9) $-7 - x = 7$

$$\begin{aligned} \star \\ -x &= 7 + 7 \\ -x &= 14 \\ x &= -14 \end{aligned}$$

答 $x = -14$

練習B 次の方程式を解け。

(1) $5x+9=-6$

★
 $5x = -6 - 9$
 $5x = -15$
 $\frac{1}{5}x = \frac{-15}{5}$
 $x = -3$

答 $x = -3$

(2) $4x+3=-5$

★
 $4x = -5 - 3$
 $4x = -8$
 $\frac{1}{4}x = \frac{-8}{4}$
 $x = -2$

答 $x = -2$

(3) $-8x+8=0$

★
 $-8x = -8$
 $\frac{-8x}{-8} = \frac{-8}{-8}$
 $x = 1$

答 $x = 1$

(4) $7-9x=4$

★
 $-9x = 4 - 7$
 $-9x = -3$
 $\frac{-9x}{-9} = \frac{-3}{-9}$
 $x = \frac{1}{3}$

答 $x = \frac{1}{3}$

(5) $9-12x=15$

★
 $-12x = 15 - 9$
 $-12x = 6$
 $\frac{-12x}{-12} = \frac{6}{-12}$
 $x = -\frac{1}{2}$

答 $x = -\frac{1}{2}$

(6) $-30+6x=0$

★
 $6x = 30$
 $\frac{6x}{6} = \frac{30}{6}$
 $x = 5$

答 $x = 5$

(7) $8+2x=9$

★
 $2x = 9 - 8$
 $2x = 1$
 $\frac{2x}{2} = \frac{1}{2}$
 $x = \frac{1}{2}$

答 $x = \frac{1}{2}$

(8) $18-24x=0$

★
 $-24x = -18$
 $\frac{-24x}{-24} = \frac{-18}{-24}$
 $x = \frac{3}{4}$

答 $x = \frac{3}{4}$

(9) $x+13=13$

★
 $x = 13 - 13$
 $x = 0$

答 $x = 0$

(10) $3x-15=-16$

★
 $3x = -16 + 15$
 $3x = -1$
 $\frac{3x}{3} = \frac{-1}{3}$
 $x = -\frac{1}{3}$

答 $x = -\frac{1}{3}$

(11) $24-2x=5$

★
 $-2x = 5 - 24$
 $-2x = -19$
 $\frac{-2x}{-2} = \frac{-19}{-2}$
 $x = \frac{19}{2}$

答 $x = \frac{19}{2}$

(12) $-6x-5=-14$

★
 $-6x = -14 + 5$
 $-6x = -9$
 $\frac{-6x}{-6} = \frac{-9}{-6}$
 $x = \frac{3}{2}$

答 $x = \frac{3}{2}$