

年 月 日 名前

1. 次の 方程式を 解きなさい。

(1) $2x = 8$

(2) $x + 9 = 4$

(3) $x + 4 = 12$

(4) $10 + x = 7$

(5) $y - 7 = 6$

(6) $4x = 6$

$$(7) \ 2x = -16$$

$$(8) \ -6x = 3$$

$$(9) \ \frac{1}{4}x = 5$$

$$(10) \ x - 3 = 11$$

$$(11) \ 4x = -2x + 18$$

$$(12) \ x + 6 = 9$$

$$(13) \quad 7x = 5x - 6$$

$$(14) \quad 4x - 7 = -15$$

$$(15) \quad 1 - 2x = 11$$

$$(16) \quad 9x = 4 - 7x$$

$$(17) \quad -2x = 3 - x$$

$$(18) \quad 9x - 5 = 2x + 23$$

$$(19) \quad 5x + 8 = 2x - 4$$

$$(20) \quad 2x + 7 = 19 - 4x$$

$$(21) \quad 9 - x = 2 + 6x$$

$$(22) \quad 8x - 10 = 9x - 4$$

$$(23) \quad 2 + 10x = 4x - 1$$

$$(24) \quad -7x + 1 = -x + 7$$

$$(25) \quad 1 + 2(x - 4) = 3$$

$$(26) \quad 4(3x + 4) + 1 = -7$$

$$(27) \quad 2x - 3(2 - x) = 4$$

$$(28) \quad 7x + 9 = 3(x - 1)$$

年 月 日 名前

1. 次の方程式を 解きなさい。

(1) $2x = 8$

$$2x = 8$$

$$\frac{2x}{2} = \frac{8}{2}$$

$$x = 4$$

$$\text{左辺} = 2 \times 4$$

$$= 8$$

$$\text{右辺} = 8$$

(2) $x + 9 = 4$

$$x + 9 = 4$$

$$x + 9 - 9 = 4 - 9$$

$$x = 4 - 9$$

$$x = -5$$

$$\text{左辺} = -5 + 9$$

$$= 4$$

$$\text{右辺} = 4$$

(3) $x + 4 = 12$

$$x + 4 = 12$$

$$x + 4 - 4 = 12 - 4$$

$$x = 12 - 4$$

$$x = 8$$

$$\text{左辺} = 8 + 4$$

$$= 12$$

$$\text{右辺} = 12$$

(4) $10 + x = 7$

$$10 + x = 7$$

$$10 + x - 10 = 7 - 10$$

$$x = 7 - 10$$

$$x = -3$$

$$\text{左辺} = 10 + (-3)$$

$$= 7$$

$$\text{右辺} = 7$$

$$(5) \ y - 7 = 6$$

$$\begin{aligned} y - 7 &= 6 \\ y - 7 + 7 &= 6 + 7 \\ y &= 6 + 7 \\ y &= 13 \end{aligned}$$

$$\begin{aligned} \text{左边} &= 13 - 7 \\ &= 6 \\ \text{右边} &= 6 \end{aligned}$$

$$(6) \ 4x = 6$$

$$\begin{aligned} 4x &= 6 \\ \frac{4x}{4} &= \frac{6}{4} \\ x &= \frac{3}{2} \end{aligned}$$

$$\begin{aligned} \text{左边} &= 4 \times \frac{3}{2} \\ &= 6 \\ \text{右边} &= 6 \end{aligned}$$

$$(7) \ 2x = -16$$

$$\begin{aligned} 2x &= -16 \\ \frac{2x}{2} &= \frac{-16}{2} \\ x &= -8 \end{aligned}$$

$$\begin{aligned} \text{左边} &= 2 \times (-8) \\ &= -16 \\ \text{右边} &= -16 \end{aligned}$$

$$(8) \ -6x = 3$$

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

$$\begin{aligned} \text{左边} &= -6 \times \left(-\frac{1}{2}\right) \\ &= 3 \\ \text{右边} &= 3 \end{aligned}$$

$$(9) \frac{1}{4}x = 5$$

$$\begin{aligned}\frac{1}{4}x &= 5 \\ 4 \times \frac{1}{4}x &= 4 \times 5 \\ x &= 20\end{aligned}$$

$$\begin{aligned}\text{左边} &= \frac{1}{4} \times 20 \\ &= 5 \\ \text{右边} &= 5\end{aligned}$$

$$(10) x - 3 = 11$$

$$\begin{aligned}x - 3 &= 11 \\ x - 3 + 3 &= 11 + 3 \\ x &= 11 + 3 \\ x &= 14\end{aligned}$$

$$\begin{aligned}\text{左边} &= 14 - 3 \\ &= 11 \\ \text{右边} &= 11\end{aligned}$$

$$(11) 4x = -2x + 18$$

$$\begin{aligned}4x &= -2x + 18 \\ 4x + 2x &= -2x + 18 + 2x \\ 4x + 2x &= 18 \\ 6x &= 18 \\ \frac{6x}{6} &= \frac{18}{6} \\ x &= 3\end{aligned}$$

$$\begin{aligned}\text{左边} &= 4 \times 3 \\ &= 12 \\ \text{右边} &= -2 \times 3 + 18 \\ &= -6 + 18 \\ &= 12\end{aligned}$$

$$(12) x + 6 = 9$$

$$\begin{aligned}x + 6 &= 9 \\ x + 6 - 6 &= 9 - 6 \\ x &= 9 - 6 \\ x &= 3\end{aligned}$$

$$\begin{aligned}\text{左边} &= 3 + 6 \\ &= 9 \\ \text{右边} &= 9\end{aligned}$$

$$(13) \quad 7x = 5x - 6$$

$$(14) \quad 4x - 7 = -15$$

$$7x = 5x - 6$$

$$7x - 5x = 5x - 6 - 5x$$

$$7x - 5x = -6$$

$$2x = -6$$

$$\frac{2x}{2} = \frac{-6}{2}$$

$$x = -3$$

$$\text{左边} = 7 \times (-3)$$

$$= -21$$

$$\text{右边} = 5 \times (-3) - 6$$

$$= -15 - 6$$

$$= -21$$

$$(15) \quad 1 - 2x = 11$$

$$(16) \quad 9x = 4 - 7x$$

$$(17) \quad -2x = 3 - x$$

$$(18) \quad 9x - 5 = 2x + 23$$

$$(19) \quad 5x + 8 = 2x - 4$$

$$(20) \quad 2x + 7 = 19 - 4x$$

$$(21) \quad 9 - x = 2 + 6x$$

$$(22) \quad 8x - 10 = 9x - 4$$

$$(23) \quad 2 + 10x = 4x - 1$$

$$(24) \quad -7x + 1 = -x + 7$$

$$(25) \quad 1 + 2(x - 4) = 3$$

$$(26) \quad 4(3x + 4) + 1 = -7$$

$$(27) \quad 2x - 3(2 - x) = 4$$

$$(28) \quad 7x + 9 = 3(x - 1)$$

(29)

$$1 + 2(x - 4) = 3$$

$$1 + 2x - 8 = 3$$

$$(1 - 1 + 2x - 8 + 8 = 3 - 1 + 8)$$

$$2x = 3 - 1 + 8$$

$$2x = 10$$

$$x = 5$$

$$\text{左辺} = 1 + 2(5 - 4)$$

$$= 1 + 2 \times 1$$

$$= 1 + 2$$

$$= 3$$

(30)

$$4(3x + 4) + 1 = -7$$

$$12x + 16 + 1 = -7$$

$$(12x + 16 - 16 + 1 - 1 = -7 - 16 - 1)$$

$$12x = -7 - 16 - 1$$

$$12x = -24$$

$$x = -2$$

$$\text{左辺} = 4(3 \times (-2) + 4) + 1$$

$$= 4(-6 + 4) + 1$$

$$= 4 \times (-2) + 1$$

$$= -8 + 1$$

$$= -7$$

(31)

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

$$2x - 6 + 3x = 4$$

$$(2x - 6 + 6 + 3x = 4 + 6)$$

$$2x + 3x = 4 + 6$$

$$5x = 10$$

$$x = 2$$

$$\text{左辺} = 2 \times 2 - 3(2 - 2)$$

$$= 4 - 3 \times 0$$

$$= 4 - 0$$

$$= 4$$

(32)

$$7x + 9 = 3(x - 1)$$

$$7x + 9 = 3x - 3$$

$$(7x + 9 - 9 - 3x = 3x - 3x - 3 - 9)$$

$$7x - 3x = -3 - 9$$

$$4x = -12$$

$$x = -3$$

$$\text{左辺} = 7 \times (-3) + 9$$

$$= -21 + 9$$

$$= -12$$

$$\text{右辺} = 3((-3) - 1)$$

$$= 3 \times (-4)$$

$$= -12$$