

問題番号  
07M0301\_2  
レベル  
☆★★

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中1 第3章 1次方程式  
①1次方程式の解と解き方 No.2 解答

授業動画QR



1. 次の方程式を解きなさい。

$$(1) 4x + 2 = -6$$

$$\begin{aligned} 4x + 2 + (-2) &= -6 + (-2) \\ 4x &= -8 \\ 4x \div 4 &= -8 \div 4 \\ x &= -2 \end{aligned}$$

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

$$\begin{aligned} -5x + 2 + (-2) &= -3 + (-2) \\ -5x &= -5 \\ -5x \div (-5) &= -5 \div (-5) \\ x &= 1 \end{aligned}$$

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

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

$$(4) -2a + 4 = a - 2$$

$$\begin{aligned} -2a + 4 + (-4) &= a - 2 + (-4) \\ -2a &= a - 6 \\ -2a + (-a) &= a + (-a) - 6 \\ -3a &= -6 \\ -3a \div (-3) &= -6 \div (-3) \\ a &= 2 \end{aligned}$$

$$(5) 5a + 7 = -2a + 4$$

$$\begin{aligned} 5a + (2a) + 7 &= -2a + (2a) + 4 \\ 7a + 7 &= 4 \\ 7a + 7 + (-7) &= 4 + (-7) \\ 7a &= -3 \\ 7a \div 7 &= -3 \div 7 \\ a &= -\frac{3}{7} \end{aligned}$$

$$(6) 2a - 3 = -9a + 14$$

$$\begin{aligned} 2a - 3 + (3) &= -9a + 14 + (3) \\ 2a &= -9a + 17 \\ 2a + (9a) &= -9a + (9a) + 17 \\ 11a &= 17 \\ 11a \div 11 &= 17 \div 11 \\ a &= \frac{17}{11} \end{aligned}$$

$$(7) 3y + 14 = -2y - 1$$

$$\begin{aligned} 3y + 14 + (-14) &= -2y - 1 + (-14) \\ 3y &= -2y - 15 \\ 3y + (2y) &= -2y + (2y) = -15 \\ 5y &= -15 \\ 5y \div 5 &= -15 \div 5 \\ y &= -3 \end{aligned}$$

$$(8) \frac{5}{6}y = \frac{10}{3}$$

$$\begin{aligned} \frac{6}{5} \times \frac{5}{6}y &= \frac{6}{5} \times \frac{10}{3} \\ y &= 4 \end{aligned}$$

$$(9) 16y - 10 = -4y + 10$$

$$\begin{aligned} 16y - 10 + (10) &= -4y + 10 + (10) \\ 16y &= -4y + 20 \\ 16y + (4y) &= -4y + (4y) + 20 \\ 20y &= 20 \\ y &= 1 \end{aligned}$$

$$(10) 14x + 25 = -20x - 43$$

$$\begin{aligned} 14x + 25 + (-25) &= -20x - 43 + (-25) \\ 14x &= -20x - 68 \\ 14x + (20x) &= -20x + (20x) - 68 \\ 34x &= -68 \\ 34x \div 34 &= -68 \div 34 \\ x &= -2 \end{aligned}$$

$$(11) -\frac{2}{5}x = \frac{14}{5}$$

$$\begin{aligned} -\frac{2}{5}x \times \left(-\frac{5}{2}\right) &= \frac{14}{5} \times \left(-\frac{5}{2}\right) \\ x &= -7 \end{aligned}$$

$$(12) -6x - 5 = \frac{5}{2}$$

$$\begin{aligned} -6x - 5 + (5) &= \frac{5}{2} + (5) \\ -6x &= \frac{15}{2} \\ -6x \times \left(-\frac{1}{6}\right) &= \frac{15}{2} \times \left(-\frac{1}{6}\right) \\ x &= -\frac{5}{4} \end{aligned}$$

$$(1) x = -2$$

$$(2) x = 1$$

$$(3) x = -3$$

$$(4) a = 2$$

$$(5) a = -\frac{3}{7}$$

$$(6) a = \frac{17}{11}$$

$$(7) y = -3$$

$$(8) y = 4$$

$$(9) y = 1$$

$$(10) x = -2$$

$$(11) x = -7$$

$$(12) x = -\frac{5}{4}$$