

<中2分野 計算プリントNo.9 解答> 等式の変形 ①

氏名 () 点数 _____

$$(1) \begin{aligned} 9x + 3y &= 15 \\ 3y &= 15 - 9x \quad \text{9xを移項} \\ y &= 5 - 3x \quad \text{両辺を3で割る} \end{aligned}$$

$$(2) \begin{aligned} -\frac{1}{3}ab &= c \\ ab &= -3c \quad \text{両辺を}-3\text{倍} \\ b &= -\frac{3c}{a} \quad \text{両辺を}a\text{で割る} \end{aligned}$$

$$(3) \begin{aligned} V &= \frac{1}{3}\pi r^2 h \quad \text{両辺を3倍} \\ 3V &= \pi r^2 h \\ \pi r^2 h &= 3V \quad \text{項の入れ換え} \\ h &= \frac{3V}{\pi r^2} \quad \text{両辺を}\pi r^2\text{で割る} \end{aligned}$$

$$(4) \begin{aligned} 3a - 4b &= 6 \\ -4b &= 6 - 3a \quad \text{3aを右辺に移項} \\ b &= -\frac{3}{2} + \frac{3}{4}a \quad \text{両辺を}-4\text{で割る} \end{aligned}$$

$$(5) \begin{aligned} V &= Sh \quad \text{項の入れ換え} \\ Sh &= V \\ h &= \frac{V}{S} \quad \text{両辺を}S\text{で割る} \end{aligned}$$

$$(6) \begin{aligned} z &= 4(x - y) \quad ()をはずす \\ z &= 4x - 4y \\ 4y &= 4x - z \quad -4yを左辺に、zを右辺に移項 \\ y &= x - \frac{z}{4} \quad \text{両辺を}4\text{で割る} \end{aligned}$$

$$(7) \begin{aligned} a &= \frac{b - 2c}{5} \quad \text{両辺を5倍} \\ 5a &= b - 2c \\ 2c &= b - 5a \quad -2cを左辺に、5aを右辺に移項 \\ c &= \frac{b - 5a}{2} \quad \text{両辺を}2\text{で割る} \end{aligned}$$

$$(8) \begin{aligned} x &= \frac{3y - 2z}{5} \quad \text{両辺を5倍} \\ 5x &= 3y - 2z \\ 2z &= 3y - 5x \quad -2zを左辺に、5xを右辺に移項 \\ z &= \frac{3y - 5x}{2} \quad \text{両辺を}2\text{で割る} \end{aligned}$$

$$(9) \begin{aligned} ax &= bx - c \quad bxを左辺に移項 \\ ax - bx &= -c \\ x(a - b) &= -c \quad \text{左辺を}x\text{でくくり出す} \\ x &= -\frac{c}{a - b} \quad \text{両辺を}a - b\text{で割る} \end{aligned}$$

$$(10) \begin{aligned} S &= \frac{ah}{a - h} \quad \text{両辺を}(a - h)\text{倍} \\ S(a - h) &= ah \quad ()をはずす \\ aS - hS &= ah \quad -hSを右辺に移項してから、項の入れ換え \\ ah + hS &= aS \\ h(a + S) &= aS \quad \text{左辺を}h\text{でくくり出す} \\ h &= \frac{aS}{a + S} \quad \text{両辺を}a + S\text{で割る} \end{aligned}$$