

# 問題

問題 1. 次の等式を [ ] 内の文字について解きなさい。

(1)  $4x + 3y = 12$  [  $y$  ]

(2)  $5x + 3y = 10$  [  $y$  ]

(3)  $3x - 2y = 15$  [  $y$  ]

(4)  $4x - 3y = 9$  [  $y$  ]

(5)  $-x + 3y = 15$  [  $y$  ]

(6)  $-2x + 5y = 6$  [  $y$  ]

(7)  $-x - 5y = 12$  [  $y$  ]

(8)  $-3x - 7y = 14$  [  $y$  ]

問題 2. 次の等式を [ ] 内の文字について解きなさい。

(1)  $S = \frac{1}{2}ah$  [  $a$  ]

(2)  $V = \frac{1}{3}hS$  [  $h$  ]

(3)  $V = \frac{1}{3}abc$  [  $c$  ]

(4)  $S = \frac{1}{6}abc$  [  $b$  ]

問題 3. 次の等式を [ ] 内の文字について解きなさい。

(1)  $a = 4(b + c)$  [  $b$  ]

(2)  $x = 3(y + z)$  [  $y$  ]

(3)  $y = 5(z - x)$  [  $x$  ]

(4)  $b = 2(-a + c)$  [  $c$  ]

(5)  $V = \frac{a + b}{3}$  [  $b$  ]

(6)  $S = \frac{a - b}{6}$  [  $b$  ]

(7)  $m = \frac{a - b + c}{3}$  [  $c$  ]

(8)  $V = \frac{x - y + 2z}{6}$  [  $z$  ]

## 練習

練習 1. 次の等式を [ ] 内の文字について解きなさい。

$$(1) 7x + 2y = 14 \quad [y]$$

$$(2) 6x + 5y = 12 \quad [y]$$

$$(3) 2x - 5y = 12 \quad [y]$$

$$(4) 6x - 7y = 14 \quad [y]$$

$$(5) -x + 4y = 16 \quad [y]$$

$$(6) -5x + 2y = 15 \quad [y]$$

$$(7) -x - 2y = 11 \quad [y]$$

$$(8) -6x - 3y = 14 \quad [y]$$

練習 2. 次の等式を [ ] 内の文字について解きなさい。

$$(1) S = \frac{1}{4}bh \quad [h]$$

$$(2) V = \frac{1}{5}xy \quad [x]$$

$$(3) V = \frac{1}{2}xyz \quad [y]$$

$$(4) V = \frac{1}{4}\pi rS \quad [r]$$

練習 3. 次の等式を [ ] 内の文字について解きなさい。

$$(1) a = 6(b + c) \quad [c]$$

$$(2) x = 5(y + z) \quad [y]$$

$$(3) b = 2(a - c) \quad [c]$$

$$(4) z = 5(-x - y) \quad [y]$$

$$(5) S = \frac{x + y}{4} \quad [y]$$

$$(6) V = \frac{x - y}{3} \quad [y]$$

$$(7) V = \frac{a - b - c}{6} \quad [c]$$

$$(8) S = \frac{a + 2b - 3c}{4} \quad [b]$$

# 解答

問題 1.

$$(1) y = -\frac{4}{3}x + 4 \quad (2) y = -\frac{5}{3}x + \frac{10}{3} \quad (3) y = \frac{3}{2}x - \frac{15}{2} \quad (4) y = \frac{4}{3}x - 3$$

$$(5) y = \frac{1}{3}x + 5 \quad (6) y = \frac{2}{5}x + \frac{6}{5} \quad (7) y = -\frac{1}{5}x - \frac{12}{5} \quad (8) y = -\frac{3}{7}x - 2$$

問題 2.

$$(1) a = \frac{2S}{h} \quad (2) h = \frac{3V}{S} \quad (3) c = \frac{3V}{ab} \quad (4) b = \frac{6S}{ac}$$

問題 3.

$$(1) b = \frac{1}{4}a - c \quad (2) y = \frac{1}{3}x - z \quad (3) x = -\frac{1}{5}y + z \quad (4) c = a + \frac{1}{2}b$$

$$(5) b = -a + 3V \quad (6) b = a - 6S \quad (7) c = -a + b + 3m \quad (8) z = -\frac{1}{2}x - \frac{1}{2}y + 3V$$

練習 1.

$$(1) y = -\frac{7}{2}x + 7 \quad (2) y = -\frac{5}{6}x + \frac{12}{5} \quad (3) y = \frac{2}{5}x - \frac{12}{5} \quad (4) y = \frac{6}{7}x - 2$$

$$(5) y = \frac{1}{4}x + 4 \quad (6) y = \frac{5}{2}x + \frac{15}{2} \quad (7) y = -\frac{1}{2}x - \frac{11}{2} \quad (8) y = -2x - \frac{14}{3}$$

練習 2.

$$(1) h = \frac{4S}{b} \quad (2) x = \frac{5V}{y} \quad (3) y = \frac{2V}{xz} \quad (4) r = \frac{4V}{\pi S}$$

練習 3.

$$(1) c = \frac{1}{6}a - b \quad (2) y = \frac{1}{5}x - z \quad (3) c = a - \frac{1}{2}b \quad (4) y = -x - \frac{1}{5}z$$

$$(5) y = 4S - x \quad (6) y = -3V + x \quad (7) c = a - b - 6V \quad (8) b = -\frac{1}{2}a + \frac{3}{2}c + 2S$$