

## 式の計算 [等式の変形]

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<演習問題>

次の等式を [ ] の中の文字について解け。

(1)  $a + b + 1 = 0$  [a]

(2)  $-a + 1 = bc$  [a]

(3)  $abc = 5$  [a]

(4)  $-3ab = 9$  [a]

(5)  $b = a + 6 - c$  [a]

(6)  $-\frac{8}{x} = 4y$  [x]

(7)  $y = \frac{x+3}{2}$  [x]

(8)  $V = abc$  [a]

(9)  $l = 2\pi r$  [r]

(10)  $V = \frac{1}{3}Sh$  [h]

(11)  $6(a + b) = 24$  [a]

(12)  $6 = 3a + 12b + 9$  [a]

(13)  $-10y + 10 = 5x + 15$  [x]

(14)  $2 = b - \frac{a}{3}$  [a]

(15)  $S = \frac{5(a+b)}{2}$  [b]

## 式の計算 [等式の変形]

### <演習問題>

次の等式を [ ] の中の文字について解け。

(1)  $a + b + 1 = 0$  [a]

$$a + b + 1 = 0$$

$$a = -b - 1$$

(2)  $-a + 1 = bc$  [a]

$$-a + 1 = bc$$

$$-a = bc - 1$$

$$a = -bc + 1$$

(3)  $abc = 5$  [a]

$$abc = 5$$

$$a = \frac{5}{bc}$$

(4)  $-3ab = 9$  [a]

$$-3ab = 9$$

$$a = \frac{9}{(-3b)}$$

$$a = -\frac{3}{b}$$

(5)  $b = a + 6 - c$  [a]

$$b = a + 6 - c$$

$$b - 6 + c = a$$

$$a = b + c - 6$$

(6)  $-\frac{8}{x} = 4y$  [x]

$$-\frac{8}{x} = 4y$$

$$-8 = 4xy$$

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

(7)  $y = \frac{x+3}{2}$  [x]

$$y = \frac{x+3}{2}$$

$$2y = x + 3$$

$$x = 2y - 3$$

(8)  $V = abc$  [a]

$$V = abc$$

$$\frac{V}{bc} = a$$

$$a = \frac{V}{bc}$$

(9)  $l = 2\pi r$  [r]

$$l = 2\pi r$$

$$\frac{l}{2\pi} = r$$

$$r = \frac{l}{2\pi}$$

(10)  $V = \frac{1}{3}Sh$  [h]

$$V = \frac{1}{3}Sh$$

$$\frac{3V}{S} = h$$

$$h = \frac{3V}{S}$$

(11)  $6(a + b) = 24$  [a]

$$6(a + b) = 24$$

$$a + b = 4$$

$$a = -b + 4$$

(12)  $6 = 3a + 12b + 9$  [a]

$$6 = 3a + 12b + 9$$

$$-3a = 12b + 3$$

$$a = -4b - 1$$

(13)  $-10y + 10 = 5x + 15$  [x]

$$-10y + 10 = 5x + 15$$

$$-10y - 5 = 5x$$

$$x = -2y - 1$$

(14)  $2 = b - \frac{a}{3}$  [a]

$$2 = b - \frac{a}{3}$$

$$6 = 3b - a$$

$$a = 3b - 6$$

(15)  $S = \frac{5(a+b)}{2}$  [b]

$$S = \frac{5(a+b)}{2}$$

$$\frac{2S}{5} = a + b$$

$$b = \frac{2S}{5} - a$$