

・中級計算問題 文字式の加法、減法

1. 次の式の項を書きなさい。赤は項，青は係数

また、文字を含む項について、係数を書きなさい。

(1) $4a - \frac{1}{3}b$

$4a, -\frac{1}{3}b$
 $a: 4, b: -\frac{1}{3}$

(2) $\frac{2}{3}a + \frac{b}{2}$

$\frac{2}{3}a, \frac{b}{2}$
 $a: \frac{2}{3}, b: \frac{1}{2}$

(3) $-3x - (-2y)$

$-3x, 2y$
 $x: -3, y: 2$

(4) $a - \frac{b}{2} + 3$

$a, -\frac{b}{2}, 3$
 $a: 1, b: -\frac{1}{2}$

2. 次の計算をしなさい。

(1) $\frac{1}{2}a + a$

$\frac{3}{2}a$

(2) $-\frac{2}{5}x - \frac{3}{10}x$

$= -\frac{4}{10}x - \frac{3}{10}x$
 $= -\frac{7}{10}x$

(3) $-\frac{3}{4}b + \frac{5}{12}b$

$= -\frac{9}{12}b + \frac{5}{12}b$
 $= -\frac{4}{12}b = -\frac{1}{3}b$

(4) $\frac{2}{7}x - (-\frac{1}{21}x)$

$= \frac{6}{21}x + \frac{1}{21}x$
 $= \frac{7}{21}x = \frac{1}{3}x$

(5) $0.5b - 3 - (1.2b + 2)$

$= -0.7b - 5$

(6) $x + \frac{1}{2} - (\frac{3}{4}x - 4)$

$= \frac{4}{4}x - \frac{3}{4}x + \frac{1}{2} + 4$
 $= \frac{1}{4}x + \frac{9}{2}$

$$\begin{aligned}
 (7) \quad & 1.2 - 3.2a + (4.8a - 0.3) \\
 & = -3.2a + 4.8a + 1.2 - 0.3 \\
 & = \underline{1.6a + 0.9}
 \end{aligned}$$

$$\begin{aligned}
 (8) \quad & \frac{2}{5}y - \left(\frac{8}{5}y + \frac{3}{10}y\right) \\
 & = \frac{4}{10}y - \frac{16}{10}y - \frac{3}{10}y \\
 & = -\frac{15}{10}y = \underline{-\frac{3}{2}y}
 \end{aligned}$$

$$\begin{aligned}
 (9) \quad & 2x + 4 - (4 + 2x) \\
 & = 2x - 2x + 4 - 4 \\
 & = \underline{0}
 \end{aligned}$$

$$\begin{aligned}
 (10) \quad & 0.2a - 4 + (a - 2.1) \\
 & = 0.2a + a - 4 - 2.1 \\
 & = \underline{1.2a - 6.1}
 \end{aligned}$$

3.左の式から右の式を足しなさい。また、引きなさい。

$$(1) -3x + 2, -2x - 1$$

$$\begin{aligned}
 \textcircled{足} \quad & (-3x + 2) + (-2x - 1) \\
 & = \underline{-5x - 1}
 \end{aligned}$$

$$(2) \frac{3}{4}a + 2, -\frac{a}{12} - 5$$

$$\begin{aligned}
 \textcircled{足} \quad & \left(\frac{3}{4}a + 2\right) + \left(-\frac{a}{12} - 5\right) \\
 & = \frac{9}{12}a - \frac{a}{12} + 2 - 5 \\
 & = \frac{8}{12}a - 3 \\
 & = \underline{\frac{2}{3}a - 3}
 \end{aligned}$$

$$\begin{aligned}
 \textcircled{引} \quad & (-3x + 2) - (-2x - 1) \\
 & = -3x + 2 + 2x + 1 \\
 & = \underline{-x + 3}
 \end{aligned}$$

$$\begin{aligned}
 \textcircled{引} \quad & \left(\frac{3}{4}a + 2\right) - \left(-\frac{a}{12} - 5\right) \\
 & = \frac{9}{12}a + \frac{a}{12} + 2 + 5 \\
 & = \frac{10}{12}a + 7 \\
 & = \underline{\frac{5}{6}a + 7}
 \end{aligned}$$