

## 式の計算のまとめ

NO. 3

名前

/10 点

1 次の計算をしなさい。

①  $5x - 3y + 4x - 5y$

②  $2(x + 4y) + 3(2x - 6y)$

③  $4(2a - b) - 2(a - 4b)$

④  $6a^2b \times 2b$

⑤  $-8a^3b^2 \div 4ab$

⑥  $18a^2b \div (-3a) \div (-b)$

2  $x = 3$   $y = -2$  のとき、次の式の値を求めなさい。

①  $2(3x - 6y)$

②  $18xy \div 6xy^2 \times (-2x)^2$

3 次の各式を 内の文字について解きなさい。

①  $3x - 9y = 6$  [  $x$  ]

②  $\frac{a}{2} = \frac{b - 2}{4}$  [  $b$  ]

## 解答

1

$$\textcircled{1} \quad 9x - 8y$$

$$\begin{aligned} \textcircled{2} \quad & 2x + 8y + 6x - 18y \\ & = 8x - 10y \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & 8a - 4b - 2a + 8b \\ & = 6a + 4b \end{aligned}$$

$$\textcircled{4} \quad 12a^2b^2$$

$$\textcircled{5} \quad -2a^2b$$

$$\textcircled{6} \quad \frac{18a^2b}{3a \times b} = 6a$$

2

$$\begin{aligned} \textcircled{1} \quad & 2(3x - 6y) \\ & = 6x - 12y \\ & = 6 \times 3 - 12 \times -2 = 42 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & \frac{18xy \times 4x^2}{6xy^2} = \frac{12x^2}{y} = \frac{12 \times 3^2}{-2} \\ & = -54 \end{aligned}$$

3

$$\begin{aligned} \textcircled{1} \quad & 3x = 9y + 6 \\ & x = 3y + 2 \end{aligned}$$

$$\textcircled{2} \quad 2a = b - 2 \quad (\text{両辺に4をかける})$$

$$b - 2 = 2a$$

$$b = 2a + 2$$