

高校入試計算練習 基本

NO. 8

名前

／12 点

1 次の計算をしなさい。

(1) $-\frac{4}{3} \div \frac{2}{3}$ (2) $18 \times \left(\frac{7}{9} - \frac{5}{6} \right)$

(3) $(-1)^3 \times (-6)$

(4) $\frac{1}{2}(8x - 6)$

(5) $4a^2b \div \left(-\frac{2}{3}ab \right)$

(6) $\sqrt{27} - \sqrt{3} + \sqrt{48}$

(7) $(2x - y)(-3x - 4y)$

(8) $x^2 - 4x - 60$ (因数分解しなさい)

2 次の方程式を解きなさい

(1) $-4x = \frac{1}{4}$

(2) $6x - 26 = 3x - 8$

(3)
$$\begin{cases} 4x + 3y = -1 \\ 3x - 2y = 12 \end{cases}$$

(4) $x^2 - 8 = 0$

解答

1

$$(1) \quad -\frac{4}{3} \times \frac{3}{2} = -2 \qquad (2) \quad 14 - 15 = -1$$

$$(3) \quad -1 \times -6 = 6$$

$$(4) \quad 4x - 3$$

$$(5) \quad 4a^2b \times \left(-\frac{3}{2ab} \right) = -6a$$

$$(6) \quad 3\sqrt{3} - \sqrt{3} + 4\sqrt{3} = 6\sqrt{3}$$

$$(7) \quad -6x^2 - 8xy + 3xy + 4y^2 \\ = -6x^2 - 5xy + 4y^2$$

$$(8) \quad (x + 6)(x - 10)$$

2

$$(1) \quad x = -\frac{1}{16} \qquad (2) \quad \begin{aligned} 3x &= 18 \\ x &= 6 \end{aligned}$$

$$(3) \quad \begin{cases} 4x + 3y = -1 & \dots\text{①} \\ 3x - 2y = 12 & \dots\text{②} \end{cases}$$

$$8x + 6y = -2$$

$$+) \quad 9x - 6y = 36$$

$$17x = 34$$

$$x = 2$$

$$x = 2 \quad \text{を①に代入して,}$$

$$8 + 3y = -1$$

$$3y = -9$$

$$y = -3$$

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

$$(4) \quad x^2 = 8$$

$$x = \pm 2\sqrt{2}$$