

# 高校入試計算練習 1、2年生 標準

**NO.1**

名前	
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     / 10 点

1 次の計算をなさい。

(1)  $12 - (-3)^2$                       (2)  $-\frac{3}{7} \times (\frac{4}{5} - \frac{1}{3})$

(3)  $2 \times (-3)^2 + (-8) \div 2$

(4)  $(\frac{4}{5} - \frac{1}{3}) \div (-\frac{2}{3})^2$

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

(6)  $\frac{x-1}{2} + \frac{4x+5}{6}$

(7)  $6a^2 \times (-ab) \div \frac{3}{4}a^3$

2 次の方程式を解きなさい

(1)  $\frac{x-1}{3} = \frac{x+2}{5}$

(2)  $2x - 1 = \frac{x}{3}$

(3) 
$$\begin{cases} 0.2x + 0.3y = 1 \\ x - 3y = 14 \end{cases}$$

## 解答

1

$$(1) \quad 12 - 9 = 3$$

$$(2) \quad -\frac{3}{7} \times \left(\frac{12}{15} - \frac{5}{15}\right) = -\frac{3}{7} \times \frac{7}{15} = -\frac{1}{5}$$

$$(3) \quad 2 \times 9 + (-4) = 18 - 4 = 14$$

$$(4) \quad \left(\frac{12}{15} - \frac{5}{15}\right) \div \frac{4}{9} = \frac{7}{15} \times \frac{9}{4} = \frac{21}{20}$$

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

$$= \frac{5}{6}x$$

$$(6) \quad \frac{3(x-1)}{6} + \frac{4x+5}{6}$$

$$= \frac{3x-3+4x+5}{6} = \frac{7x+2}{6}$$

$$(7) \quad 6a^2 \times (-ab) \times \frac{4}{3a^3}$$

$$= -8b$$

2

$$(1) \quad \frac{x-1}{3} = \frac{x+2}{5} \quad \text{両辺に15をかける}$$

$$5(x-1) = 3(x+2)$$

$$5x-5 = 3x+6$$

$$2x = 11$$

$$x = \frac{11}{2}$$

$$(2) \quad 2x-1 = \frac{x}{3} \quad \text{両辺に3をかける}$$

$$6x-3 = x$$

$$5x = 3$$

$$x = \frac{3}{5}$$

$$(3) \begin{cases} 0.2x + 0.3y = 1 & \dots\textcircled{1} \\ x - 3y = 14 & \dots\textcircled{2} \end{cases}$$

$$\textcircled{1} \times 10 \quad 2x + 3y = 10 \quad \dots\textcircled{3}$$

$$\textcircled{3} - \textcircled{2} \times 2$$

$$\begin{array}{r} 2x + 3y = 10 \\ - ) 2x - 6y = 28 \\ \hline \end{array}$$

$$9y = -18$$

$$y = -2$$

$y = -2$  を $\textcircled{1}$ に代入して,

$$x - 3 \times -2 = 14$$

$$x = 8$$

$$(x, y) = (8, -2)$$