

分数の計算のくふう 練習1

目標時間

8分

NO.1

名前

____/5

1 次の式の□にあてはまる整数を求めなさい。ただし、それぞれ異なる整数が入るものとします。

$$\textcircled{1} \quad \frac{5}{12} = \frac{1}{\square} + \frac{1}{\square}$$

$$\textcircled{2} \quad \frac{7}{18} = \frac{1}{\square} + \frac{1}{\square}$$

2 次の計算をしなさい。

$$\textcircled{1} \quad \frac{1}{3 \times 4} + \frac{1}{4 \times 5} + \frac{1}{5 \times 6} + \frac{1}{6 \times 7}$$

$$\textcircled{2} \quad \frac{1}{12} + \frac{1}{20} + \frac{1}{30} + \frac{1}{42} + \frac{1}{56}$$

$$\textcircled{3} \quad \frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \frac{1}{4 \times 5} + \dots + \frac{1}{14 \times 15}$$

答え

① $\frac{5}{12} = \frac{2}{12} + \frac{3}{12} = \frac{1}{6} + \frac{1}{4}$

② $\frac{7}{18} = \frac{1}{18} + \frac{6}{18} = \frac{1}{18} + \frac{1}{3}$

2

① $(\frac{1}{3} - \frac{1}{4}) + (\frac{1}{4} - \frac{1}{5}) + (\frac{1}{5} - \frac{1}{6}) + (\frac{1}{6} - \frac{1}{7})$
 $= \frac{1}{3} - \frac{1}{7} = \frac{7}{21} - \frac{3}{21} = \frac{4}{21}$

② $\frac{1}{3 \times 4} + \frac{1}{4 \times 5} + \frac{1}{5 \times 6} + \frac{1}{6 \times 7} + \frac{1}{7 \times 8}$
 $= (\frac{1}{3} - \frac{1}{4}) + (\frac{1}{4} - \frac{1}{5}) + (\frac{1}{5} - \frac{1}{6}) + (\frac{1}{6} - \frac{1}{7}) + (\frac{1}{7} - \frac{1}{8})$
 $= \frac{1}{3} - \frac{1}{8} = \frac{8}{24} - \frac{3}{24} = \frac{5}{24}$

③ $(\frac{1}{4} - \frac{1}{5}) + (\frac{1}{5} - \frac{1}{6}) + \dots + (\frac{1}{19} - \frac{1}{20})$
 $= \frac{1}{4} - \frac{1}{20} = \frac{5}{20} - \frac{1}{20} = \frac{4}{20} = \frac{1}{5}$