

分数の計算のくふう2

目標時間 10分

NO.1

名前

/6 点

■ 次の計算をくふうしてしなさい。

$$\textcircled{1} \quad \frac{1}{6 \times 7} + \frac{1}{7 \times 8} + \frac{1}{8 \times 9}$$

$$\textcircled{2} \quad \frac{1}{1 \times 2} + \frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \dots + \frac{1}{11 \times 12}$$

$$\textcircled{3} \quad \frac{1}{4 \times 5} + \frac{1}{5 \times 6} + \frac{1}{6 \times 7} + \frac{1}{7 \times 8}$$

$$\textcircled{4} \quad \frac{1}{30} + \frac{1}{42} + \frac{1}{56} + \frac{1}{72}$$

答え

$$\begin{aligned} \textcircled{1} \quad & \left(\frac{1}{6} - \frac{1}{7} \right) + \left(\frac{1}{7} - \frac{1}{8} \right) + \left(\frac{1}{8} - \frac{1}{9} \right) \\ & = \frac{1}{6} - \frac{1}{9} = \frac{3}{18} - \frac{2}{18} = \frac{1}{18} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & \left(\frac{1}{1} - \frac{1}{2} \right) + \left(\frac{1}{2} - \frac{1}{3} \right) + \dots + \left(\frac{1}{11} - \frac{1}{12} \right) \\ & = \frac{1}{1} - \frac{1}{12} = \frac{12}{12} - \frac{1}{12} = \frac{11}{12} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & \left(\frac{1}{4} - \frac{1}{5} \right) + \left(\frac{1}{5} - \frac{1}{6} \right) + \left(\frac{1}{6} - \frac{1}{7} \right) \\ & + \left(\frac{1}{7} - \frac{1}{8} \right) \\ & = \frac{1}{4} - \frac{1}{8} = \frac{2}{8} - \frac{1}{8} = \frac{1}{8} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & \frac{1}{5 \times 6} + \frac{1}{6 \times 7} + \frac{1}{7 \times 8} + \frac{1}{8 \times 9} \\ & = \frac{1}{5} - \frac{1}{9} = \frac{9}{45} - \frac{5}{45} = \frac{4}{45} \end{aligned}$$