

42

分数の計算

年 組 番 名前

● 計算のしかた ● 〈3つの分数のかけ算〉

$$\frac{3}{5} \times \frac{2}{3} \times \frac{5}{7} = \frac{\overset{1}{\cancel{3}} \times 2 \times \overset{1}{\cancel{5}}}{\underset{1}{\cancel{5}} \times \underset{1}{\cancel{3}} \times 7} = \frac{2}{7}$$

途中で約分できる
ときは約分します。

→ 37, 41へ

〈計算の決まり〉

- ① $\bigcirc \times \triangle = \triangle \times \bigcirc$
- ② $(\bigcirc \times \triangle) \times \square = \bigcirc \times (\triangle \times \square)$
- ③ $(\bigcirc + \triangle) \times \square = \bigcirc \times \square + \triangle \times \square$
- ④ $(\bigcirc - \triangle) \times \square = \bigcirc \times \square - \triangle \times \square$

☆分数の計算でも“計算のきまり”を使う
ことができます。 → 29へ

$$\textcircled{1} \frac{3}{10} \times \frac{5}{8} \times \frac{4}{9} = \frac{\overset{1}{\cancel{3}} \times \overset{1}{\cancel{5}} \times 1 \times 4 \times 1}{2 \times 10 \times \underset{1}{\cancel{2}} \times \underset{1}{\cancel{8}} \times 9 \times 3} = \frac{1}{12}$$

$$\textcircled{2} \frac{8}{7} \times \frac{3}{4} \times \frac{7}{9} = \frac{2 \times \underset{1}{\cancel{8}} \times \overset{1}{\cancel{3}} \times 7 \times 1}{1 \times 7 \times \underset{1}{\cancel{4}} \times 1 \times 9 \times 3} = \frac{2}{3}$$

$$\textcircled{3} \frac{5}{6} \times \frac{2}{3} \times \frac{9}{10} = \frac{1 \times \overset{1}{\cancel{5}} \times \underset{1}{\cancel{2}} \times 1 \times \underset{1}{\cancel{9}} \times 3 \times 1}{1 \times \underset{1}{\cancel{3}} \times 6 \times 1 \times 3 \times 10 \times 2} = \frac{1}{2}$$

$$\textcircled{4} \frac{3}{4} \times \frac{5}{6} \times \frac{8}{15} = \frac{1 \times \overset{1}{\cancel{3}} \times \overset{1}{\cancel{5}} \times \underset{1}{\cancel{8}} \times 2 \times 1}{1 \times 4 \times \underset{1}{\cancel{6}} \times \underset{1}{\cancel{2}} \times 1 \times 15 \times 3} = \frac{1}{3}$$

$$\textcircled{5} \frac{5}{12} \times \frac{3}{5} \times \frac{8}{9} = \frac{\overset{1}{\cancel{5}} \times \overset{1}{\cancel{3}} \times \underset{1}{\cancel{8}} \times 2}{3 \times \underset{1}{\cancel{12}} \times \underset{1}{\cancel{5}} \times 1 \times 9 \times 3} = \frac{2}{9}$$

□にあてはまる数を書こう

$$\textcircled{1} \left(\frac{5}{7} \times \frac{1}{8} \right) \times \frac{2}{5} = \boxed{\frac{5}{7}} \times \left(\frac{1}{8} \times \frac{2}{5} \right)$$

$$\textcircled{2} \left(\frac{2}{3} - \frac{1}{9} \right) \times \frac{3}{5} = \frac{2}{3} \times \boxed{\frac{3}{5}} - \boxed{\frac{1}{9}} \times \frac{3}{5}$$

$$\textcircled{3} \frac{5}{6} \times \frac{2}{3} = \boxed{\frac{2}{3}} \times \boxed{\frac{5}{6}}$$

$$\textcircled{4} \frac{1}{5} \times \frac{2}{3} + \frac{7}{10} \times \frac{2}{3} = \left(\boxed{\frac{1}{5}} + \boxed{\frac{7}{10}} \right) \times \frac{2}{3}$$