

【計算のきまり】分数のかけ算 (4)

名前 _____

【1】 次の計算の決まりを使って計算しなさい。

計算のきまり

$$(a \times b) \times c = a \times (b \times c)$$

$$(a + b) \times c = a \times c + b \times c$$

$$(a - b) \times c = a \times c - b \times c$$

$$(1) \left(\frac{9}{5} \times \frac{2}{3}\right) \times \frac{1}{2}$$

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

$$(2) \left(\frac{3}{7} \times \frac{3}{4}\right) \times \frac{2}{3}$$

$$= \frac{3}{7} \times \left(\frac{3}{4} \times \frac{2}{3}\right) = \frac{3}{7} \times \frac{1}{2} = \frac{3}{14}$$

$$(3) \left(\frac{1}{3} \times \frac{5}{9}\right) \times \frac{8}{5}$$

$$= \frac{1}{3} \times \left(\frac{5}{9} \times \frac{8}{5}\right) = \frac{1}{3} \times \frac{8}{9} = \frac{8}{27}$$

$$(4) \left(\frac{5}{8} \times \frac{7}{6}\right) \times \frac{12}{7}$$

$$= \frac{5}{8} \times \left(\frac{7}{6} \times \frac{12}{7}\right) = \frac{5}{8} \times 2 = \frac{5}{4} \left(1\frac{1}{4}\right)$$

$$(5) \left(\frac{1}{3} + \frac{2}{5}\right) \times \frac{15}{11}$$

$$= \frac{1}{3} \times \frac{15}{11} + \frac{2}{5} \times \frac{15}{11} = \frac{5}{11} + \frac{6}{11} = 1$$

$$(6) \left(\frac{1}{6} + \frac{2}{3}\right) \times \frac{6}{5}$$

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

$$(7) \left(\frac{3}{2} + \frac{5}{8}\right) \times \frac{8}{3}$$

$$= \frac{3}{2} \times \frac{8}{3} + \frac{5}{8} \times \frac{8}{3} = 4 + \frac{5}{3} = \frac{17}{3} \left(5\frac{2}{3}\right)$$

$$(8) \left(\frac{7}{4} + \frac{1}{3}\right) \times \frac{12}{11}$$

$$= \frac{7}{4} \times \frac{12}{11} + \frac{1}{3} \times \frac{12}{11} = \frac{21}{11} + \frac{4}{11} = \frac{25}{11}$$

$\left(2\frac{3}{11}\right)$

$$(9) \left(\frac{3}{2} - \frac{8}{7}\right) \times \frac{14}{9}$$

$$= \frac{3}{2} \times \frac{14}{9} - \frac{8}{7} \times \frac{14}{9} = \frac{21}{9} - \frac{16}{9} = \frac{5}{9}$$

$$(10) \left(\frac{5}{2} - \frac{5}{9}\right) \times \frac{18}{7}$$

$$= \frac{5}{2} \times \frac{18}{7} - \frac{5}{9} \times \frac{18}{7} = \frac{45}{7} - \frac{10}{7} = 5$$

$$(11) \left(\frac{3}{4} - \frac{1}{5}\right) \times \frac{20}{7}$$

$$= \frac{3}{4} \times \frac{20}{7} - \frac{1}{5} \times \frac{20}{7} = \frac{15}{7} - \frac{4}{7} = \frac{11}{7} \left(1\frac{4}{7}\right)$$

$$(12) \left(\frac{7}{3} - \frac{1}{2}\right) \times \frac{6}{13}$$

$$= \frac{7}{3} \times \frac{6}{13} - \frac{1}{2} \times \frac{6}{13} = \frac{14}{13} - \frac{3}{13} = \frac{11}{13}$$