

【計算のきまり】分数のかけ算 (3)

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

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

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

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

$$(1) \left(\frac{5}{7} \times \frac{2}{9}\right) \times \frac{7}{2}$$

$$= \frac{5}{7} \times \left(\frac{2}{9} \times \frac{7}{2}\right) = \frac{5}{7} \times \frac{7}{9} = \frac{5}{9}$$

$$(2) \left(\frac{3}{4} \times \frac{5}{4}\right) \times \frac{9}{10}$$

$$= \frac{3}{4} \times \left(\frac{5}{4} \times \frac{9}{10}\right) = \frac{3}{4} \times \frac{9}{8} = \frac{27}{32}$$

$$(3) \left(\frac{9}{4} \times \frac{11}{6}\right) \times \frac{1}{11}$$

$$= \frac{9}{4} \times \left(\frac{11}{6} \times \frac{1}{11}\right) = \frac{9}{4} \times \frac{1}{6} = \frac{3}{8}$$

$$(4) \left(\frac{9}{4} \times \frac{5}{8}\right) \times \frac{16}{5}$$

$$= \frac{9}{4} \times \left(\frac{5}{8} \times \frac{16}{5}\right) = \frac{9}{4} \times 2 = \frac{9}{2} \left(4\frac{1}{2}\right)$$

$$(5) \left(\frac{2}{3} + \frac{1}{5}\right) \times \frac{15}{8}$$

$$= \frac{2}{3} \times \frac{15}{8} + \frac{1}{5} \times \frac{15}{8} = \frac{10}{8} + \frac{3}{8} = \frac{13}{8} \left(1\frac{5}{8}\right)$$

$$(6) \left(\frac{2}{3} + \frac{5}{6}\right) \times \frac{18}{7}$$

$$= \frac{2}{3} \times \frac{18}{7} + \frac{5}{6} \times \frac{18}{7} = \frac{12}{7} + \frac{15}{7} = \frac{27}{7} \left(3\frac{6}{7}\right)$$

$$(7) \left(\frac{11}{9} + \frac{4}{3}\right) \times \frac{9}{4}$$

$$= \frac{11}{9} \times \frac{9}{4} + \frac{4}{3} \times \frac{9}{4} = \frac{11}{4} + \frac{12}{4} = \frac{23}{4} \left(5\frac{3}{4}\right)$$

$$(8) \left(\frac{9}{14} + \frac{1}{2}\right) \times \frac{14}{9}$$

$$= \frac{9}{14} \times \frac{14}{9} + \frac{1}{2} \times \frac{14}{9} = 1 + \frac{7}{9} = \frac{16}{9} \left(1\frac{7}{9}\right)$$

$$(9) \left(\frac{8}{5} - \frac{3}{2}\right) \times \frac{10}{7}$$

$$= \frac{8}{5} \times \frac{10}{7} - \frac{3}{2} \times \frac{10}{7} = \frac{16}{7} - \frac{15}{7} = \frac{1}{7}$$

$$(10) \left(\frac{7}{4} - \frac{2}{3}\right) \times \frac{12}{5}$$

$$= \frac{7}{4} \times \frac{12}{5} - \frac{2}{3} \times \frac{12}{5} = \frac{21}{5} - \frac{8}{5} = \frac{13}{5} \left(2\frac{3}{5}\right)$$

$$(11) \left(\frac{11}{4} - \frac{7}{8}\right) \times \frac{8}{11}$$

$$= \frac{11}{4} \times \frac{8}{11} - \frac{7}{8} \times \frac{8}{11} = 2 - \frac{7}{11} = \frac{15}{11} \left(1\frac{4}{11}\right)$$

$$(12) \left(\frac{2}{3} - \frac{4}{7}\right) \times \frac{21}{8}$$

$$= \frac{2}{3} \times \frac{21}{8} - \frac{4}{7} \times \frac{21}{8} = \frac{14}{8} - \frac{12}{8} = \frac{1}{4}$$