

【計算のきまり】分数のかけ算 (2)

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

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

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

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

$$(1) \left(\frac{1}{7} \times \frac{5}{6}\right) \times \frac{6}{7}$$

$$= \frac{1}{7} \times \left(\frac{5}{6} \times \frac{6}{7}\right) = \frac{1}{7} \times \frac{5}{7} = \frac{5}{49}$$

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

$$= \frac{5}{7} \times \left(\frac{10}{3} \times \frac{9}{10}\right) = \frac{5}{7} \times 3 = \frac{15}{7} \left(2\frac{1}{7}\right)$$

$$(3) \left(\frac{3}{2} \times \frac{9}{11}\right) \times \frac{8}{9}$$

$$= \frac{3}{2} \times \left(\frac{9}{11} \times \frac{8}{9}\right) = \frac{3}{2} \times \frac{8}{11} = \frac{12}{11} \left(1\frac{1}{11}\right)$$

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

$$= \frac{5}{2} \times \left(\frac{7}{12} \times \frac{6}{5}\right) = \frac{5}{2} \times \frac{7}{10} = \frac{7}{4} \left(1\frac{3}{4}\right)$$

$$(5) \left(\frac{5}{3} + \frac{1}{6}\right) \times \frac{6}{11}$$

$$= \frac{5}{3} \times \frac{6}{11} + \frac{1}{6} \times \frac{6}{11} = \frac{10}{11} + \frac{1}{11} = 1$$

$$(6) \left(\frac{3}{8} + \frac{2}{3}\right) \times \frac{24}{7}$$

$$= \frac{3}{8} \times \frac{24}{7} + \frac{2}{3} \times \frac{24}{7} = \frac{9}{7} + \frac{16}{7} = \frac{25}{7} \left(3\frac{4}{7}\right)$$

$$(7) \left(\frac{4}{7} + \frac{3}{14}\right) \times \frac{14}{5}$$

$$= \frac{4}{7} \times \frac{14}{5} + \frac{3}{14} \times \frac{14}{5} = \frac{8}{5} + \frac{3}{5} = \frac{11}{5} \left(2\frac{1}{5}\right)$$

$$(8) \left(\frac{11}{3} + \frac{1}{2}\right) \times \frac{6}{13}$$

$$= \frac{11}{3} \times \frac{6}{13} + \frac{1}{2} \times \frac{6}{13} = \frac{22}{13} + \frac{3}{13} = \frac{25}{13} \left(1\frac{12}{13}\right)$$

$$(9) \left(\frac{9}{4} - \frac{1}{3}\right) \times \frac{12}{7}$$

$$= \frac{9}{4} \times \frac{12}{7} - \frac{1}{3} \times \frac{12}{7} = \frac{27}{7} - \frac{4}{7} = \frac{23}{7} \left(3\frac{2}{7}\right)$$

$$(10) \left(\frac{2}{9} - \frac{1}{6}\right) \times \frac{18}{7}$$

$$= \frac{2}{9} \times \frac{18}{7} - \frac{1}{6} \times \frac{18}{7} = \frac{4}{7} - \frac{3}{7} = \frac{1}{7}$$

$$(11) \left(\frac{8}{3} - \frac{2}{5}\right) \times \frac{15}{2}$$

$$= \frac{8}{3} \times \frac{15}{2} - \frac{2}{5} \times \frac{15}{2} = 20 - 3 = 17$$

$$(12) \left(\frac{1}{2} - \frac{2}{5}\right) \times \frac{10}{9}$$

$$= \frac{1}{2} \times \frac{10}{9} - \frac{2}{5} \times \frac{10}{9} = \frac{5}{9} - \frac{4}{9} = \frac{1}{9}$$