

分数のわり算 (1)

名前 _____

【分数 ÷ 分数の計算】

【1】 次の計算をなさい。

$$(1) \frac{1}{2} \div \frac{1}{2} = \frac{1 \times \cancel{2}^1}{\cancel{2} \times 1} = 1$$

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

$$(3) \frac{2}{5} \div \frac{4}{7} = \frac{\cancel{2}^1 \times 7}{5 \times \cancel{4}_2} = \frac{7}{10}$$

$$(4) \frac{7}{12} \div \frac{3}{8} = \frac{7 \times \cancel{8}^2}{\cancel{12}_3 \times 3} = \frac{14}{9} \left(1\frac{5}{9}\right)$$

$$(5) \frac{13}{3} \div \frac{11}{6} = \frac{13 \times \cancel{6}^2}{\cancel{3}_1 \times 11} = \frac{26}{11} \left(2\frac{4}{11}\right)$$

$$(6) \frac{5}{4} \div \frac{15}{7} = \frac{\cancel{5}^1 \times 7}{4 \times \cancel{15}_3} = \frac{7}{12}$$

$$(7) \frac{4}{3} \div \frac{3}{8} = \frac{4 \times 8}{3 \times 3} = \frac{32}{9} \left(3\frac{5}{9}\right)$$

$$(8) \frac{8}{5} \div \frac{4}{9} = \frac{\cancel{8}^2 \times 9}{5 \times \cancel{4}_1} = \frac{18}{5} \left(3\frac{3}{5}\right)$$

$$(9) \frac{7}{6} \div \frac{9}{14} = \frac{7 \times \cancel{14}^7}{\cancel{6}_3 \times 9} = \frac{49}{27} \left(1\frac{22}{27}\right)$$

$$(10) \frac{9}{26} \div \frac{9}{4} = \frac{\cancel{9}^1 \times \cancel{4}^2}{\cancel{26}_{13} \times \cancel{9}_1} = \frac{2}{13}$$

$$(11) \frac{17}{12} \div \frac{13}{6} = \frac{17 \times \cancel{6}^3}{\cancel{12}_2 \times 13} = \frac{17}{26}$$

$$(12) \frac{11}{8} \div \frac{3}{4} = \frac{11 \times \cancel{4}^1}{\cancel{8}_2 \times 3} = \frac{11}{6} \left(1\frac{5}{6}\right)$$

$$(13) \frac{9}{10} \div \frac{15}{7} = \frac{\cancel{9}^3 \times 7}{10 \times \cancel{15}_5} = \frac{21}{50}$$

$$(14) \frac{8}{13} \div \frac{16}{15} = \frac{\cancel{8}^1 \times 15}{13 \times \cancel{16}_2} = \frac{15}{26}$$

【2】 次の問題に答えなさい

(1) $\frac{3}{2}$ Lのお茶を1日 $\frac{1}{4}$ Lずつ飲むと、何日で飲み終わりますか。

$$\text{式} \quad \frac{3}{2} \div \frac{1}{4} = \frac{3 \times \cancel{4}^2}{\cancel{2}_1 \times 1} = 6$$

答え 6日

(2) $\frac{1}{3}$ kmの道のりを $\frac{14}{3}$ 分かけて歩いた人の歩く速さは分速何kmですか。

$$\text{式} \quad \frac{1}{3} \div \frac{14}{3} = \frac{1 \times \cancel{3}^1}{\cancel{3}_1 \times 14} = \frac{1}{14}$$

答え 分速 $\frac{1}{14}$ km

分数のわり算 (2)

名前 _____

【分数 ÷ 分数の計算】

【1】 次の計算をなさい。

$$(1) \frac{8}{15} \div \frac{4}{11} = \frac{\overset{2}{\cancel{8}} \times 11}{15 \times \underset{1}{\cancel{4}}} = \frac{22}{15} \left(1\frac{7}{15}\right)$$

$$(2) \frac{10}{13} \div \frac{5}{6} = \frac{\overset{2}{\cancel{10}} \times 6}{13 \times \underset{1}{\cancel{5}}} = \frac{12}{13}$$

$$(3) \frac{8}{5} \div \frac{4}{9} = \frac{\overset{2}{\cancel{8}} \times 9}{5 \times \underset{1}{\cancel{4}}} = \frac{18}{5} \left(3\frac{3}{5}\right)$$

$$(4) \frac{12}{11} \div \frac{6}{7} = \frac{\overset{2}{\cancel{12}} \times 7}{11 \times \underset{1}{\cancel{6}}} = \frac{14}{11} \left(1\frac{3}{11}\right)$$

$$(5) \frac{9}{7} \div \frac{3}{4} = \frac{\overset{3}{\cancel{9}} \times 4}{7 \times \underset{1}{\cancel{3}}} = \frac{12}{7} \left(1\frac{5}{7}\right)$$

$$(6) \frac{11}{10} \div \frac{2}{5} = \frac{11 \times \overset{5}{\cancel{10}}}{\underset{2}{10} \times 2} = \frac{11}{4} \left(2\frac{3}{4}\right)$$

$$(7) \frac{7}{18} \div \frac{13}{12} = \frac{7 \times \overset{2}{\cancel{12}}}{\underset{3}{18} \times 13} = \frac{14}{39}$$

$$(8) \frac{3}{4} \div \frac{7}{2} = \frac{3 \times \overset{1}{\cancel{2}}}{\underset{2}{4} \times 7} = \frac{3}{14}$$

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

$$(10) \frac{4}{5} \div \frac{11}{10} = \frac{4 \times \overset{2}{\cancel{10}}}{\underset{1}{5} \times 11} = \frac{8}{11}$$

$$(11) \frac{19}{8} \div \frac{11}{4} = \frac{19 \times \overset{1}{\cancel{4}}}{\underset{2}{8} \times 11} = \frac{19}{22}$$

$$(12) \frac{7}{3} \div \frac{14}{11} = \frac{\overset{1}{\cancel{7}} \times 11}{3 \times \underset{2}{\cancel{14}}} = \frac{11}{6} \left(1\frac{5}{6}\right)$$

$$(13) \frac{12}{5} \div \frac{18}{13} = \frac{\overset{2}{\cancel{12}} \times 13}{5 \times \underset{3}{\cancel{18}}} = \frac{26}{15} \left(1\frac{11}{15}\right)$$

$$(14) \frac{15}{14} \div \frac{20}{7} = \frac{\overset{3}{\cancel{15}} \times \overset{1}{\cancel{7}}}{\underset{2}{14} \times \underset{4}{20}} = \frac{3}{8}$$

【2】 次の問題に答えなさい

(1) $\frac{8}{3}$ m あたりの重さが $\frac{4}{5}$ kg の棒があります。この棒 1m の重さは何 kg ですか。

$$\text{式} \quad \frac{4}{5} \div \frac{8}{3} = \frac{\overset{1}{\cancel{4}} \times 3}{5 \times \underset{2}{\cancel{8}}} = \frac{3}{10}$$

答え
 $\frac{3}{10}$ kg

(2) 分速 $\frac{3}{35}$ km で歩くと、 $\frac{3}{7}$ km の道のりを歩くのに何分かかりますか。

$$\text{式} \quad \frac{3}{7} \div \frac{3}{35} = \frac{\overset{1}{\cancel{3}} \times \overset{5}{\cancel{35}}}{\underset{1}{7} \times \underset{1}{\cancel{3}}} = 5$$

答え
5 分

分数のわり算 (3)

名前 _____

【分数 ÷ 分数の計算】

【1】 次の計算をなさい。

$$(1) \frac{1}{6} \div \frac{5}{8} = \frac{1 \times \overset{4}{\cancel{8}}}{\underset{3}{\cancel{6}} \times 5} = \frac{4}{15}$$

$$(2) \frac{1}{4} \div \frac{1}{2} = \frac{1 \times \overset{1}{\cancel{2}}}{\underset{2}{\cancel{4}} \times 1} = \frac{1}{2}$$

$$(3) \frac{2}{3} \div \frac{3}{4} = \frac{2 \times 4}{3 \times 3} = \frac{8}{9}$$

$$(4) \frac{3}{5} \div \frac{1}{10} = \frac{3 \times \overset{2}{\cancel{10}}}{\underset{1}{\cancel{5}} \times 1} = 6$$

$$(5) \frac{5}{2} \div \frac{7}{10} = \frac{5 \times \overset{5}{\cancel{10}}}{\underset{1}{\cancel{2}} \times 7} = \frac{25}{7} \left(3\frac{4}{7}\right)$$

$$(6) \frac{16}{11} \div \frac{8}{11} = \frac{\overset{2}{\cancel{16}} \times \overset{1}{\cancel{11}}}{\underset{1}{\cancel{11}} \times \underset{1}{\cancel{8}}} = 2$$

$$(7) \frac{7}{3} \div \frac{5}{6} = \frac{7 \times \overset{2}{\cancel{6}}}{\underset{1}{\cancel{3}} \times 5} = \frac{14}{5} \left(2\frac{4}{5}\right)$$

$$(8) \frac{14}{9} \div \frac{4}{15} = \frac{\overset{7}{\cancel{14}} \times \overset{5}{\cancel{15}}}{\underset{3}{\cancel{9}} \times \underset{2}{\cancel{4}}} = \frac{35}{6} \left(5\frac{5}{6}\right)$$

$$(9) \frac{7}{12} \div \frac{8}{3} = \frac{7 \times \overset{1}{\cancel{3}}}{\underset{4}{\cancel{12}} \times 8} = \frac{7}{32}$$

$$(10) \frac{8}{11} \div \frac{12}{7} = \frac{\overset{2}{\cancel{8}} \times 7}{11 \times \underset{3}{\cancel{12}}} = \frac{14}{33}$$

$$(11) \frac{16}{5} \div \frac{20}{9} = \frac{\overset{4}{\cancel{16}} \times 9}{5 \times \underset{5}{\cancel{20}}} = \frac{36}{25} \left(1\frac{11}{25}\right)$$

$$(12) \frac{24}{7} \div \frac{6}{5} = \frac{\overset{4}{\cancel{24}} \times 5}{7 \times \underset{1}{\cancel{6}}} = \frac{20}{7} \left(2\frac{6}{7}\right)$$

$$(13) \frac{11}{6} \div \frac{11}{3} = \frac{\overset{1}{\cancel{11}} \times \overset{1}{\cancel{3}}}{\underset{2}{\cancel{6}} \times \underset{1}{\cancel{11}}} = \frac{1}{2}$$

$$(14) \frac{23}{12} \div \frac{13}{6} = \frac{23 \times \overset{1}{\cancel{6}}}{\underset{2}{\cancel{12}} \times 13} = \frac{23}{26}$$

【2】 次の問題に答えなさい

(1) $\frac{5}{4}$ m のリボンを $\frac{5}{12}$ m ずつ切ると、何本に分けることができますか。

$$\text{式} \quad \frac{5}{4} \div \frac{5}{12} = \frac{\overset{1}{\cancel{5}} \times \overset{3}{\cancel{12}}}{\underset{1}{\cancel{4}} \times \underset{1}{\cancel{5}}} = 3$$

答え 3本

(2) 面積が $\frac{28}{3}$ cm² で縦 $\frac{8}{9}$ cm の長方形の横の長さは何 cm ですか。

$$\text{式} \quad \frac{28}{3} \div \frac{8}{9} = \frac{\overset{7}{\cancel{28}} \times \overset{3}{\cancel{9}}}{\underset{1}{\cancel{3}} \times \underset{2}{\cancel{8}}} = \frac{21}{2}$$

答え $\frac{21}{2}$ cm $\left(10\frac{1}{2}$ cm)

分数のわり算 (4)

名前 _____

【分数 ÷ 分数の計算】

【1】 次の計算をなさい。

$$(1) \frac{10}{11} \div \frac{5}{12} = \frac{\overset{2}{\cancel{10}} \times 12}{11 \times \underset{1}{\cancel{5}}} = \frac{24}{11} \left(2\frac{2}{11}\right)$$

$$(2) \frac{2}{3} \div \frac{4}{7} = \frac{\overset{1}{\cancel{2}} \times 7}{3 \times \underset{2}{\cancel{4}}} = \frac{7}{6} \left(1\frac{1}{6}\right)$$

$$(3) \frac{4}{11} \div \frac{2}{11} = \frac{\overset{2}{\cancel{4}} \times \overset{1}{\cancel{11}}}{\underset{1}{\cancel{11}} \times \underset{1}{\cancel{2}}} = 2$$

$$(4) \frac{5}{9} \div \frac{1}{6} = \frac{5 \times \overset{2}{\cancel{6}}}{\underset{3}{\cancel{9}} \times 1} = \frac{10}{3} \left(3\frac{1}{3}\right)$$

$$(5) \frac{7}{2} \div \frac{7}{8} = \frac{\overset{1}{\cancel{7}} \times \overset{4}{\cancel{8}}}{\underset{1}{\cancel{2}} \times \underset{1}{\cancel{7}}} = 4$$

$$(6) \frac{9}{5} \div \frac{3}{4} = \frac{\overset{3}{\cancel{9}} \times 4}{5 \times \underset{1}{\cancel{3}}} = \frac{12}{5} \left(2\frac{2}{5}\right)$$

$$(7) \frac{3}{14} \div \frac{8}{7} = \frac{3 \times \overset{1}{\cancel{7}}}{\underset{2}{\cancel{14}} \times 8} = \frac{3}{16}$$

$$(8) \frac{4}{7} \div \frac{16}{9} = \frac{\overset{1}{\cancel{4}} \times 9}{7 \times \underset{4}{\cancel{16}}} = \frac{9}{28}$$

$$(9) \frac{5}{4} \div \frac{15}{8} = \frac{\overset{1}{\cancel{5}} \times \overset{2}{\cancel{8}}}{\underset{1}{\cancel{4}} \times \underset{3}{\cancel{15}}} = \frac{2}{3}$$

$$(10) \frac{11}{18} \div \frac{9}{10} = \frac{11 \times \overset{5}{\cancel{10}}}{\underset{9}{\cancel{18}} \times 9} = \frac{55}{81}$$

$$(11) \frac{15}{4} \div \frac{20}{3} = \frac{\overset{3}{\cancel{15}} \times 3}{4 \times \underset{4}{\cancel{20}}} = \frac{9}{16}$$

$$(12) \frac{11}{8} \div \frac{9}{10} = \frac{11 \times \overset{5}{\cancel{10}}}{\underset{4}{\cancel{8}} \times 9} = \frac{55}{36} \left(1\frac{19}{36}\right)$$

$$(13) \frac{22}{7} \div \frac{11}{6} = \frac{\overset{2}{\cancel{22}} \times 6}{7 \times \underset{1}{\cancel{11}}} = \frac{12}{7} \left(1\frac{5}{7}\right)$$

$$(14) \frac{10}{9} \div \frac{25}{12} = \frac{\overset{2}{\cancel{10}} \times \overset{4}{\cancel{12}}}{\underset{3}{\cancel{9}} \times \underset{5}{\cancel{25}}} = \frac{8}{15}$$

【2】 次の問題に答えなさい

(1) $\frac{5}{4}$ cm の赤のリボンの長さは、 $\frac{7}{6}$ cm の青のリボンの何倍の長さですか。

$$\text{式} \quad \frac{5}{4} \div \frac{7}{6} = \frac{5 \times \overset{3}{\cancel{6}}}{\underset{2}{\cancel{4}} \times 7} = \frac{15}{14}$$

答え $\frac{15}{14}$ 倍 (1 $\frac{1}{14}$ 倍)

(2) $\frac{4}{3}$ dL で $\frac{5}{6}$ m² をぬれるペンキを 1dL 使うと、何 m² をぬることができますか。

$$\text{式} \quad \frac{5}{6} \div \frac{4}{3} = \frac{5 \times \overset{1}{\cancel{3}}}{\underset{2}{\cancel{6}} \times 4} = \frac{5}{8}$$

答え $\frac{5}{8}$ m²

分数のわり算 (5)

名前 _____

【分数 ÷ 分数の計算】

【1】 次の計算をしなさい。

$$(1) \frac{2}{7} \div \frac{5}{8} = \frac{2 \times 8}{7 \times 5} = \frac{16}{35}$$

$$(2) \frac{6}{7} \div \frac{3}{10} = \frac{\overset{2}{\cancel{6}} \times 10}{7 \times \underset{1}{\cancel{3}}} = \frac{20}{7} \left(2\frac{6}{7}\right)$$

$$(3) \frac{5}{3} \div \frac{1}{6} = \frac{5 \times \overset{2}{\cancel{6}}}{\underset{1}{\cancel{3}} \times 1} = 10$$

$$(4) \frac{7}{4} \div \frac{3}{14} = \frac{7 \times \overset{7}{\cancel{14}}}{\underset{2}{\cancel{4}} \times 3} = \frac{49}{6} \left(8\frac{1}{6}\right)$$

$$(5) \frac{9}{2} \div \frac{6}{7} = \frac{\overset{3}{\cancel{9}} \times 7}{2 \times \underset{2}{\cancel{6}}} = \frac{21}{4} \left(5\frac{1}{4}\right)$$

$$(6) \frac{11}{8} \div \frac{1}{4} = \frac{11 \times \overset{1}{\cancel{4}}}{\underset{2}{\cancel{8}} \times 1} = \frac{11}{2} \left(5\frac{1}{2}\right)$$

$$(7) \frac{8}{17} \div \frac{8}{3} = \frac{\overset{1}{\cancel{8}} \times 3}{17 \times \underset{1}{\cancel{8}}} = \frac{3}{17}$$

$$(8) \frac{2}{5} \div \frac{16}{9} = \frac{\overset{1}{\cancel{2}} \times 9}{5 \times \underset{8}{\cancel{16}}} = \frac{9}{40}$$

$$(9) \frac{4}{9} \div \frac{8}{5} = \frac{\overset{1}{\cancel{4}} \times 5}{9 \times \underset{2}{\cancel{8}}} = \frac{5}{18}$$

$$(10) \frac{5}{6} \div \frac{10}{3} = \frac{\overset{1}{\cancel{5}} \times \overset{1}{\cancel{3}}}{\underset{2}{\cancel{6}} \times \underset{2}{\cancel{10}}} = \frac{1}{4}$$

$$(11) \frac{30}{7} \div \frac{9}{5} = \frac{\overset{10}{\cancel{30}} \times 5}{7 \times \underset{3}{\cancel{9}}} = \frac{50}{21} \left(2\frac{8}{21}\right)$$

$$(12) \frac{11}{4} \div \frac{17}{4} = \frac{11 \times \overset{1}{\cancel{4}}}{\underset{1}{\cancel{4}} \times 17} = \frac{11}{17}$$

$$(13) \frac{3}{2} \div \frac{9}{7} = \frac{\overset{1}{\cancel{3}} \times 7}{2 \times \underset{3}{\cancel{9}}} = \frac{7}{6} \left(1\frac{1}{6}\right)$$

$$(14) \frac{8}{5} \div \frac{28}{9} = \frac{\overset{2}{\cancel{8}} \times 9}{5 \times \underset{7}{\cancel{28}}} = \frac{18}{35}$$

【2】 次の問題に答えなさい

(1) A君とB君の水とうには、水がそれぞれ $\frac{1}{2}$ L、 $\frac{2}{5}$ L 入っています。A君の水筒には、B君の水とうの何倍の水が入っていますか。

$$\text{式} \quad \frac{1}{2} \div \frac{2}{5} = \frac{1 \times 5}{2 \times 2} = \frac{5}{4}$$

答え $\frac{5}{4}$ 倍 $\left(1\frac{1}{4}\right)$ 倍

(2) $\frac{4}{5}$ m あたりの重さが $\frac{7}{2}$ kg の棒があります。この棒 1m の重さは何 kg ですか。

$$\text{式} \quad \frac{7}{2} \div \frac{4}{5} = \frac{7 \times 5}{2 \times 4} = \frac{35}{8}$$

答え $\frac{35}{8}$ kg $\left(4\frac{3}{8}\right)$ kg