

1. 次の分数を小数で表せ。  
Express the following fractions in decimals.

れいだい 例題	もんだい 問題
① $\frac{1}{2} = \underline{0.5}$ <div><div>0.5</div><div>2 ) 1 0 0</div></div>	① $\frac{3}{5}$ <div><div></div><div>)</div></div>
② $\frac{1}{4} = \underline{0.25}$ <div><div>0.25</div><div>4 ) 1 0 0 0</div></div>	② $\frac{3}{4}$ <div><div></div><div>)</div></div>

2. 次の計算をせよ。  
Calculate the following decimal numbers

れいだい 例題	もんだい 問題
① $0.25 \times 3 = \underline{0.75}$ <div><div>0.25</div><div>× 3</div><div>0.75</div></div>	① $0.5 \times 5$ <div><div></div><div>×</div><div></div></div>
② $0.6 \times 0.5 = \underline{0.3}$ <div><div>0.6</div><div>× 0.5</div><div>0.30</div></div>	② $0.4 \times 0.5$ <div><div></div><div>×</div><div></div></div>
③ $0.75 \times 0.5 = \underline{0.375}$ <div><div>0.75</div><div>× 0.5</div><div>0.375</div></div>	③ $0.25 \times 0.5$ <div><div></div><div>×</div><div></div></div>
④ $0.125 \div 0.5$ $= 1.25 \div 5 = \underline{0.25}$ <div><div>0.25</div><div>5 ) 1 2 5 0</div></div>	④ $0.25 \div 0.6$ <div><div></div><div>)</div></div>

3. 次の分数の計算をせよ。  
Calculate the following fractions.

れいだい 例題	もんだい 問題
① $\frac{1}{4} \times 3 \quad (= \frac{1}{4} \times \frac{3}{1})$ $= \frac{1 \times 3}{4 \times 1} = \underline{\frac{3}{4}}$	① $\frac{1}{2} \times 5$
② $\frac{3}{5} \times \frac{1}{2}$ $= \frac{3 \times 1}{5 \times 2} = \underline{\frac{3}{10}}$	② $\frac{2}{5} \times \frac{1}{2}$
③ $\frac{3}{4} \times \frac{1}{2}$ $= \frac{3 \times 1}{4 \times 2} = \underline{\frac{3}{8}}$	③ $\frac{1}{4} \times \frac{1}{2}$
④ $\frac{6}{7} \times \frac{7}{4} \times \frac{5}{3}$ $= \frac{1 \times 5}{2 \times 1} = \underline{\frac{5}{2}}$	④ $\frac{5}{6} \times \frac{4}{5} \times \frac{3}{7}$
⑤ $\frac{1}{8} \div \frac{1}{2}$ $= \frac{1}{8} \times \frac{2}{1} = \underline{\frac{1}{4}}$	⑤ $\frac{1}{4} \div \frac{3}{5}$
⑥ $\frac{3}{8} \div \frac{5}{6}$ $= \frac{3}{8} \times \frac{6}{5} = \underline{\frac{9}{20}}$	⑥ $\frac{5}{6} \div \frac{3}{8}$
⑦ $\frac{3}{10} \div \frac{3}{5}$ $= \frac{3}{10} \times \frac{5}{3} = \underline{\frac{1}{2}}$	⑦ $\frac{2}{5} \div \frac{2}{7}$
⑧ $\frac{4}{5} \div 2 \quad (= \frac{4}{5} \div \frac{2}{1})$ $= \frac{4}{5} \times \frac{1}{2} = \underline{\frac{2}{5}}$	⑧ $\frac{6}{5} \div 3$
⑨ $\frac{2}{5} \div \frac{4}{5} \div \frac{4}{3}$ $= \frac{2}{5} \times \frac{5}{4} \times \frac{3}{4}$ $= \underline{\frac{2}{3}}$	⑨ $\frac{3}{4} \div \frac{5}{4} \div \frac{5}{3}$

1. 次の分数の約分をせよ。

Reduce the following fractions.

れい だい 例題	もん だい 問題
① $\frac{4}{6}$  $= \frac{\cancel{2} \times 2}{\cancel{2} \times 3} = \frac{2}{3}$	① $\frac{2}{8}$
② $\frac{3}{6}$  $= \frac{\cancel{3} \times 1}{\cancel{3} \times 2} = \frac{1}{2}$	② $\frac{6}{9}$
③ $\frac{12}{8}$  $= \frac{\cancel{4} \times 3}{\cancel{4} \times 2} = \frac{3}{2}$	③ $\frac{20}{15}$
④ $\frac{6}{3}$  $= \frac{\cancel{3} \times 2}{\cancel{3} \times 1} = \frac{2}{1} = 2$	④ $\frac{24}{4}$

2. 次の分数の掛け算をせよ。

Multiply the following fractions.

れい だい 例題	もん だい 問題
① $\frac{2}{3} \times \frac{4}{5}$  $= \frac{2 \times 4}{3 \times 5} = \frac{8}{15}$	① $\frac{2}{3} \times \frac{8}{7}$
② $\frac{\overset{1}{\cancel{2}}}{\underset{2}{\cancel{4}}} \times \frac{3}{5}$  $= \frac{1 \times 3}{2 \times 5} = \frac{3}{10}$	② $\frac{4}{8} \times \frac{3}{5}$
③ $\frac{3}{\underset{1}{\cancel{4}}} \times \frac{\overset{2}{\cancel{8}}}{5}$  $= \frac{3 \times 2}{1 \times 5} = \frac{6}{5}$	③ $\frac{5}{6} \times \frac{3}{4}$
④ $\frac{\overset{1}{\cancel{2}}}{\underset{2}{\cancel{8}}} \times \frac{\overset{3}{\cancel{6}}}{5}$  $= \frac{1 \times 3}{2 \times 5} = \frac{3}{10}$	④ $\frac{2}{18} \times \frac{6}{7}$
⑤ $\frac{\overset{1}{\cancel{5}}}{\underset{2}{\cancel{4}}} \times \frac{\overset{3}{\cancel{6}}}{\underset{1}{\cancel{5}}}$  $= \frac{1 \times 3}{2 \times 1} = \frac{3}{2}$	⑤ $\frac{7}{6} \times \frac{3}{7}$
⑥ $\frac{\overset{2}{\cancel{6}}}{\underset{7}{\cancel{35}}} \times \frac{\overset{2}{\cancel{10}}}{\underset{3}{\cancel{21}}} \times \frac{\overset{2}{\cancel{14}}}{\underset{5}{\cancel{15}}}$  $= \frac{2 \times 2 \times 2}{7 \times 3 \times 5} = \frac{8}{105}$	⑥ $\frac{15}{14} \times \frac{21}{10} \times \frac{6}{35}$
⑦ $\frac{2}{3} \times 5$ $(5 = \frac{5}{1})$  $= \frac{2 \times 5}{3 \times 1} = \frac{10}{3}$	⑦ $\frac{3}{4} \times 7$

3. 次の分数の計算をせよ。

Calculate the following fractions.

れい だい 例題	もん だい 問題
① $\frac{2}{3} \div \frac{7}{5}$  $= (\frac{2}{3} \times \frac{5}{7}) \div (\frac{7}{5} \times \frac{5}{7})$  $= \frac{2}{3} \times \frac{5}{7} \div 1 = \frac{10}{21}$	① $\frac{3}{7} \div \frac{2}{5}$
② $\frac{2}{3} \div 5$ $(5 = \frac{5}{1})$  $= (\frac{2}{3} \times \frac{1}{5}) \div (\frac{5}{1} \times \frac{1}{5})$  $= \frac{2}{3} \times \frac{1}{5} \div 1 = \frac{2}{15}$	② $\frac{3}{7} \div 2$

4. 次の分数の割り算をせよ。

Calculate the division of the following fractions.

れい だい 例題	もん だい 問題
① $\frac{1}{3} \div \frac{4}{5}$  $= \frac{1}{3} \times \frac{5}{4}$  $= \frac{1 \times 5}{3 \times 4} = \frac{5}{12}$	① $\frac{3}{8} \div \frac{4}{5}$
② $\frac{3}{6} \div \frac{5}{3}$  $= \frac{\overset{1}{\cancel{3}}}{\underset{2}{\cancel{6}}} \times \frac{3}{5}$  $= \frac{1 \times 3}{2 \times 5} = \frac{3}{10}$	② $\frac{8}{6} \div \frac{5}{3}$
③ $\frac{3}{4} \div \frac{6}{5}$  $= \frac{\overset{1}{\cancel{3}}}{4} \times \frac{5}{\underset{2}{\cancel{6}}}$  $= \frac{1 \times 5}{4 \times 2} = \frac{5}{8}$	③ $\frac{5}{6} \div \frac{2}{3}$
④ $\frac{10}{3} \div \frac{5}{6}$  $= \frac{\overset{2}{\cancel{10}}}{3} \times \frac{\overset{2}{\cancel{6}}}{\underset{1}{\cancel{5}}}$  $= \frac{2 \times 2}{1 \times 1} = \frac{4}{1} = 4$	④ $\frac{9}{4} \div \frac{3}{8}$
⑤ $\frac{15}{4} \div 6$  $= \frac{\overset{5}{\cancel{15}}}{4} \times \frac{1}{\underset{2}{\cancel{6}}}$  $= \frac{5 \times 1}{4 \times 2} = \frac{5}{8}$	⑤ $\frac{4}{3} \div 8$

基礎数学 分数の掛け算・割り算 3 課題

( )年( )組( )番( )

1. 次の分数の約分をせよ。 Reduce the following fractions.

れいだい 例題	もんだい 問題
① $\frac{6}{9}$  $= \frac{\cancel{3} \times 2}{\cancel{3} \times 3} = \frac{2}{3}$	① $\frac{4}{8}$
② $\frac{12}{8}$  $= \frac{\cancel{4} \times 3}{\cancel{4} \times 2} = \frac{3}{2}$	② $\frac{15}{6}$
③ $\frac{12}{6}$  $= \frac{\cancel{6} \times 2}{\cancel{6} \times 1} = \frac{2}{1} = 2$	③ $\frac{20}{5}$

2. 次の分数の掛け算をせよ。 Multiply the following fractions.

れいだい 例題	もんだい 問題
① $\frac{1}{3} \times \frac{2}{5}$  $= \frac{1 \times 2}{3 \times 5} = \frac{2}{15}$	① $\frac{5}{8} \times \frac{3}{7}$
② $\frac{\cancel{2}^2 4}{\cancel{6}_3} \times \frac{5}{7}$  $= \frac{2 \times 5}{3 \times 7} = \frac{10}{21}$	② $\frac{3}{9} \times \frac{4}{5}$
③ $\frac{5}{\cancel{6}_3} \times \frac{\cancel{4}^2}{3}$  $= \frac{5 \times 2}{3 \times 3} = \frac{10}{9}$	③ $\frac{3}{8} \times \frac{4}{5}$
④ $\frac{\cancel{2}^1 \cancel{6}_4}{\cancel{3}^1} \times \frac{\cancel{3}^1}{5}$  $= \frac{1 \times 1}{4 \times 5} = \frac{1}{5}$	④ $\frac{4}{6} \times \frac{9}{5}$
⑤ $\frac{\cancel{1}^1 \cancel{7}_3}{\cancel{6}_2} \times \frac{\cancel{4}^2 \cancel{7}^1}{1}$  $= \frac{1 \times 3}{2 \times 1} = \frac{3}{2}$	⑤ $\frac{7}{6} \times \frac{3}{14}$
⑥ $\frac{\cancel{3}^3 \cancel{6}_5}{\cancel{35}_{14}} \times \frac{\cancel{15}_7}{\cancel{14}_2} \times \frac{\cancel{21}_3}{\cancel{10}_2}$  $= \frac{3 \times 3 \times 3}{5 \times 7 \times 2} = \frac{27}{70}$	⑥ $\frac{3}{4} \times \frac{2}{15} \times \frac{10}{21}$
⑦ $\frac{4}{7} \times 6$ $(6 = \frac{6}{1})$  $= \frac{4 \times 6}{7 \times 1} = \frac{24}{7}$	⑦ $\frac{4}{7} \times 2$
⑧ $\frac{5}{\cancel{6}_3} \times \frac{\cancel{4}^2}{1}$ $(2 = \frac{2}{1})$  $= \frac{5 \times 2}{3 \times 1} = \frac{10}{3}$	⑧ $\frac{5}{4} \times 6$

3. 次の分数の計算をせよ。 Calculate the following fractions.

れいだい 例題	もんだい 問題
① $\frac{4}{5} \div \frac{7}{6}$  $= (\frac{4}{5} \times \frac{6}{7}) \div (\frac{7}{6} \times \frac{6}{7})$  $= \frac{4}{5} \times \frac{6}{7} \div 1 = \frac{24}{35}$	① $\frac{3}{4} \div \frac{5}{3}$
② $\frac{3}{5} \div 2$ $(2 = \frac{2}{1})$  $= (\frac{3}{5} \times \frac{1}{2}) \div (\frac{2}{1} \times \frac{1}{2})$  $= \frac{3}{5} \times \frac{1}{2} \div 1 = \frac{3}{10}$	② $\frac{5}{7} \div 3$

4. 次の分数の割り算をせよ。 Calculate the division of the following fractions.

れいだい 例題	もんだい 問題
① $\frac{2}{3} \div \frac{7}{5}$  $= \frac{2}{3} \times \frac{5}{7}$  $= \frac{2 \times 5}{3 \times 7} = \frac{10}{21}$	① $\frac{7}{6} \div \frac{3}{5}$
② $\frac{2}{4} \div \frac{7}{5}$  $= \frac{\cancel{2}^1 \cancel{4}_2}{\cancel{4}_2} \times \frac{5}{7}$  $= \frac{1 \times 5}{2 \times 7} = \frac{5}{14}$	② $\frac{4}{6} \div \frac{5}{3}$
③ $\frac{3}{8} \div \frac{9}{5}$  $= \frac{\cancel{3}^1 \cancel{8}_4}{\cancel{8}_4} \times \frac{5}{9}$  $= \frac{1 \times 5}{8 \times 3} = \frac{5}{24}$	③ $\frac{5}{6} \div \frac{4}{9}$
④ $\frac{3}{4} \div \frac{7}{8}$  $= \frac{3}{\cancel{4}_2} \times \frac{\cancel{8}^2}{7}$  $= \frac{3 \times 2}{1 \times 7} = \frac{6}{7}$	④ $\frac{5}{3} \div \frac{7}{6}$
⑤ $\frac{20}{3} \div 6$  $= \frac{\cancel{20}^{10} \cancel{2}_2}{3} \times \frac{1}{\cancel{6}_3}$  $= \frac{10 \times 1}{3 \times 3} = \frac{10}{9}$	⑤ $\frac{4}{3} \div 8$

1. 次の分数の約分をせよ。 Reduce the following fractions.

れいだい 例題	もんだい 問題
① $\frac{10}{15}$  $= \frac{\cancel{5} \times 2}{\cancel{5} \times 3} = \frac{2}{3}$	① $\frac{14}{21}$
② $\frac{20}{8}$  $= \frac{\cancel{4} \times 5}{\cancel{4} \times 2} = \frac{5}{2}$	② $\frac{15}{20}$
③ $\frac{28}{7}$  $= \frac{\cancel{7} \times 4}{\cancel{7} \times 1} = \frac{4}{1} = 4$	③ $\frac{35}{7}$

2. 次の分数の掛け算をせよ。 Multiply the following fractions.

れいだい 例題	もんだい 問題
① $\frac{2}{3} \times \frac{5}{7}$  $= \frac{2 \times 5}{3 \times 7} = \frac{10}{21}$	① $\frac{5}{6} \times \frac{3}{7}$
② $\frac{\cancel{1}^1 \cancel{4}^2}{\cancel{8}^2} \times \frac{3}{7}$  $= \frac{1 \times 3}{2 \times 7} = \frac{3}{14}$	② $\frac{2}{8} \times \frac{5}{9}$
③ $\frac{5}{\cancel{6}^3} \times \frac{\cancel{8}^4}{3}$  $= \frac{5 \times 4}{3 \times 3} = \frac{20}{9}$	③ $\frac{3}{10} \times \frac{4}{5}$
④ $\frac{\cancel{1}^1 \cancel{2}^2}{\cancel{8}^4} \times \frac{\cancel{1}^1 \cancel{2}^2}{5}$  $= \frac{1 \times 1}{2 \times 5} = \frac{1}{10}$	④ $\frac{3}{6} \times \frac{4}{5}$
⑤ $\frac{\cancel{1}^1 \cancel{7}^2}{\cancel{10}^2} \times \frac{\cancel{1}^1 \cancel{5}^2}{\cancel{14}^2}$  $= \frac{1 \times 1}{2 \times 2} = \frac{1}{4}$	⑤ $\frac{5}{6} \times \frac{9}{10}$
⑥ $\frac{\cancel{3}^3 \cancel{9}^5}{\cancel{20}^5} \times \frac{\cancel{12}^3}{\cancel{35}^7} \times \frac{\cancel{15}^3}{\cancel{26}^2}$  $= \frac{3 \times 3 \times 3}{5 \times 7 \times 2} = \frac{27}{70}$	⑥ $\frac{3}{4} \times \frac{2}{21} \times \frac{7}{6}$
⑦ $\frac{3}{2} \times 5$ $(5 = \frac{5}{1})$  $= \frac{3 \times 5}{2 \times 1} = \frac{15}{2}$	⑦ $\frac{5}{3} \times 4$
⑧ $\frac{5}{\cancel{2}^1} \times \frac{\cancel{2}^2}{4}$ $(2 = \frac{2}{1})$  $= \frac{5 \times 2}{1 \times 1} = \frac{10}{1} = 10$	⑧ $\frac{5}{4} \times 6$

3. 次の分数の計算をせよ。 Calculate the following fractions.

れいだい 例題	もんだい 問題
① $\frac{4}{5} \div \frac{3}{2}$  $= (\frac{4}{5} \times \frac{2}{3}) \div (\frac{3}{2} \times \frac{2}{3})$  $= \frac{4}{5} \times \frac{2}{3} \div 1 = \frac{8}{15}$	① $\frac{3}{4} \div \frac{7}{5}$
② $\frac{4}{5} \div 3$ $(3 = \frac{3}{1})$  $= (\frac{4}{5} \times \frac{1}{3}) \div (\frac{3}{1} \times \frac{1}{3})$  $= \frac{4}{5} \times \frac{1}{3} \div 1 = \frac{4}{15}$	② $\frac{5}{6} \div 2$

4. 次の分数の割り算をせよ。 Calculate the division of the following fractions.

れいだい 例題	もんだい 問題
① $\frac{3}{2} \div \frac{5}{7}$  $= \frac{3}{2} \times \frac{7}{5}$  $= \frac{3 \times 7}{2 \times 5} = \frac{21}{10}$	① $\frac{7}{4} \div \frac{2}{3}$
② $\frac{6}{3} \div \frac{7}{5}$  $= \frac{\cancel{2}^2 \cancel{6}^3}{\cancel{3}^1} \times \frac{5}{7}$  $= \frac{2 \times 5}{1 \times 7} = \frac{10}{7}$	② $\frac{9}{3} \div \frac{5}{2}$
③ $\frac{3}{7} \div \frac{9}{4}$  $= \frac{\cancel{1}^1 \cancel{3}^2}{7} \times \frac{4}{\cancel{9}^3}$  $= \frac{1 \times 4}{7 \times 3} = \frac{4}{21}$	③ $\frac{8}{5} \div \frac{6}{7}$
④ $\frac{5}{6} \div \frac{7}{8}$  $= \frac{5}{\cancel{6}^3} \times \frac{\cancel{8}^4}{7}$  $= \frac{5 \times 4}{3 \times 7} = \frac{20}{21}$	④ $\frac{5}{6} \div \frac{2}{9}$
⑤ $\frac{15}{4} \div 5$  $= \frac{\cancel{3}^3 \cancel{5}^2}{4} \times \frac{1}{\cancel{5}^1}$  $= \frac{3 \times 1}{4 \times 1} = \frac{3}{4}$	⑤ $\frac{4}{5} \div 2$