

Dividiere die Brüche und wandle in einen gemischten Bruch um, falls möglich:

① a) $\frac{1}{5} : \frac{1}{20} =$

b) $\frac{4}{13} : \frac{3}{13} =$

c) $\frac{5}{8} : \frac{9}{14} =$

d) $\frac{3}{4} : \frac{17}{22} =$

② a) $\frac{7}{15} : \frac{3}{10} =$

b) $\frac{1}{2} : \frac{11}{36} =$

c) $\frac{2}{21} : \frac{4}{11} =$

d) $\frac{2}{43} : \frac{2}{41} =$

③ a) $\frac{3}{17} : \frac{3}{29} =$

b) $\frac{4}{9} : \frac{4}{19} =$

c) $\frac{1}{14} : \frac{7}{12} =$

d) $\frac{10}{11} : \frac{2}{7} =$

④ a) $\frac{4}{15} : \frac{1}{24} =$

b) $\frac{1}{8} : \frac{7}{32} =$

c) $\frac{26}{29} : \frac{2}{3} =$

d) $\frac{5}{36} : \frac{1}{9} =$

⑤ a) $\frac{4}{5} : \frac{16}{17} =$

b) $\frac{1}{2} : \frac{7}{22} =$

c) $\frac{16}{39} : \frac{1}{6} =$

d) $\frac{1}{44} : \frac{2}{33} =$

Dividiere die Brüche und wandle in einen gemischten Bruch um, falls möglich:

$$\textcircled{1} \quad \text{a) } \frac{1}{5} : \frac{1}{20} = \frac{1}{5} \cdot \frac{20}{1} = \frac{1 \cdot 4}{1 \cdot 1} = 4 \quad \text{b) } \frac{4}{13} : \frac{3}{13} = \frac{4}{13} \cdot \frac{13}{3} = \frac{4 \cdot 1}{1 \cdot 3} = 1 \frac{1}{3}$$

$$\text{c) } \frac{5}{8} : \frac{9}{14} = \frac{5}{8} \cdot \frac{14}{9} = \frac{5 \cdot 7}{4 \cdot 9} = \frac{35}{36} \quad \text{d) } \frac{3}{4} : \frac{17}{22} = \frac{3}{4} \cdot \frac{22}{17} = \frac{3 \cdot 11}{2 \cdot 17} = \frac{33}{34}$$

$$\textcircled{2} \quad \text{a) } \frac{7}{15} : \frac{3}{10} = \frac{7}{15} \cdot \frac{10}{3} = \frac{7 \cdot 2}{3 \cdot 3} = 1 \frac{5}{9} \quad \text{b) } \frac{1}{2} : \frac{11}{36} = \frac{1}{2} \cdot \frac{36}{11} = \frac{1 \cdot 18}{1 \cdot 11} = 1 \frac{7}{11}$$

$$\text{c) } \frac{2}{21} : \frac{4}{11} = \frac{2}{21} \cdot \frac{11}{4} = \frac{1 \cdot 11}{21 \cdot 2} = \frac{11}{42} \quad \text{d) } \frac{2}{43} : \frac{2}{41} = \frac{2}{43} \cdot \frac{41}{2} = \frac{1 \cdot 41}{43 \cdot 1} = \frac{41}{43}$$

$$\textcircled{3} \quad \text{a) } \frac{3}{17} : \frac{3}{29} = \frac{3}{17} \cdot \frac{29}{3} = \frac{1 \cdot 29}{17 \cdot 1} = 1 \frac{12}{17} \quad \text{b) } \frac{4}{9} : \frac{4}{19} = \frac{4}{9} \cdot \frac{19}{4} = \frac{1 \cdot 19}{9 \cdot 1} = 2 \frac{1}{9}$$

$$\text{c) } \frac{1}{14} : \frac{7}{12} = \frac{1}{14} \cdot \frac{12}{7} = \frac{1 \cdot 6}{7 \cdot 7} = \frac{6}{49} \quad \text{d) } \frac{10}{11} : \frac{2}{7} = \frac{10}{11} \cdot \frac{7}{2} = \frac{5 \cdot 7}{11 \cdot 1} = 3 \frac{2}{11}$$

$$\textcircled{4} \quad \text{a) } \frac{4}{15} : \frac{1}{24} = \frac{4}{15} \cdot \frac{24}{1} = \frac{4 \cdot 8}{5 \cdot 1} = 6 \frac{2}{5} \quad \text{b) } \frac{1}{8} : \frac{7}{32} = \frac{1}{8} \cdot \frac{32}{7} = \frac{1 \cdot 4}{1 \cdot 7} = \frac{4}{7}$$

$$\text{c) } \frac{26}{29} : \frac{2}{3} = \frac{26}{29} \cdot \frac{3}{2} = \frac{13 \cdot 3}{29 \cdot 1} = 1 \frac{10}{29} \quad \text{d) } \frac{5}{36} : \frac{1}{9} = \frac{5}{36} \cdot \frac{9}{1} = \frac{5 \cdot 1}{4 \cdot 1} = 1 \frac{1}{4}$$

$$\textcircled{5} \quad \text{a) } \frac{4}{5} : \frac{16}{17} = \frac{4}{5} \cdot \frac{17}{16} = \frac{1 \cdot 17}{5 \cdot 4} = \frac{17}{20} \quad \text{b) } \frac{1}{2} : \frac{7}{22} = \frac{1}{2} \cdot \frac{22}{7} = \frac{1 \cdot 11}{1 \cdot 7} = 1 \frac{4}{7}$$

$$\text{c) } \frac{16}{39} : \frac{1}{6} = \frac{16}{39} \cdot \frac{6}{1} = \frac{16 \cdot 2}{13 \cdot 1} = 2 \frac{6}{13} \quad \text{d) } \frac{1}{44} : \frac{2}{33} = \frac{1}{44} \cdot \frac{33}{2} = \frac{1 \cdot 3}{4 \cdot 2} = \frac{3}{8}$$