

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

① a) $\frac{1}{15} : \frac{2}{15} =$

b) $\frac{5}{6} : \frac{11}{20} =$

c) $\frac{3}{8} : \frac{6}{31} =$

d) $\frac{2}{7} : \frac{10}{23} =$

② a) $\frac{2}{45} : \frac{1}{30} =$

b) $\frac{3}{32} : \frac{3}{32} =$

c) $\frac{2}{21} : \frac{4}{31} =$

d) $\frac{6}{11} : \frac{9}{16} =$

③ a) $\frac{22}{39} : \frac{1}{3} =$

b) $\frac{5}{8} : \frac{10}{17} =$

c) $\frac{2}{9} : \frac{6}{23} =$

d) $\frac{4}{5} : \frac{17}{20} =$

④ a) $\frac{25}{26} : \frac{1}{2} =$

b) $\frac{7}{10} : \frac{9}{14} =$

c) $\frac{5}{18} : \frac{5}{6} =$

d) $\frac{3}{11} : \frac{6}{31} =$

⑤ a) $\frac{4}{35} : \frac{1}{25} =$

b) $\frac{3}{23} : \frac{3}{14} =$

c) $\frac{1}{9} : \frac{2}{15} =$

d) $\frac{1}{4} : \frac{1}{20} =$

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

$$\textcircled{1} \quad \text{a) } \frac{1}{15} : \frac{2}{15} = \frac{1}{15} \cdot \frac{15}{2} = \frac{1 \cdot 15}{1 \cdot 2} = \frac{1}{2} \quad \text{b) } \frac{5}{6} : \frac{11}{20} = \frac{5}{6} \cdot \frac{20}{11} = \frac{5 \cdot 20}{3 \cdot 11} = 1 \frac{17}{33}$$

$$\text{c) } \frac{3}{8} : \frac{6}{31} = \frac{3}{8} \cdot \frac{31}{6} = \frac{1 \cdot 31}{8 \cdot 2} = 1 \frac{15}{16} \quad \text{d) } \frac{2}{7} : \frac{10}{23} = \frac{2}{7} \cdot \frac{23}{10} = \frac{1 \cdot 23}{7 \cdot 5} = \frac{23}{35}$$

$$\textcircled{2} \quad \text{a) } \frac{2}{45} : \frac{1}{30} = \frac{2}{45} \cdot \frac{30}{1} = \frac{2 \cdot 2}{3 \cdot 1} = 1 \frac{1}{3} \quad \text{b) } \frac{3}{32} : \frac{3}{32} = \frac{3}{32} \cdot \frac{32}{3} = \frac{1 \cdot 1}{1 \cdot 1} = 1$$

$$\text{c) } \frac{2}{21} : \frac{4}{31} = \frac{2}{21} \cdot \frac{31}{4} = \frac{1 \cdot 31}{21 \cdot 2} = \frac{31}{42} \quad \text{d) } \frac{6}{11} : \frac{9}{16} = \frac{6}{11} \cdot \frac{16}{9} = \frac{2 \cdot 16}{11 \cdot 3} = \frac{32}{33}$$

$$\textcircled{3} \quad \text{a) } \frac{22}{39} : \frac{1}{3} = \frac{22}{39} \cdot \frac{3}{1} = \frac{22 \cdot 1}{13 \cdot 1} = 1 \frac{9}{13} \quad \text{b) } \frac{5}{8} : \frac{10}{17} = \frac{5}{8} \cdot \frac{17}{10} = \frac{1 \cdot 17}{8 \cdot 2} = 1 \frac{1}{16}$$

$$\text{c) } \frac{2}{9} : \frac{6}{23} = \frac{2}{9} \cdot \frac{23}{6} = \frac{1 \cdot 23}{9 \cdot 3} = \frac{23}{27} \quad \text{d) } \frac{4}{5} : \frac{17}{20} = \frac{4}{5} \cdot \frac{20}{17} = \frac{4 \cdot 4}{1 \cdot 17} = \frac{16}{17}$$

$$\textcircled{4} \quad \text{a) } \frac{25}{26} : \frac{1}{2} = \frac{25}{26} \cdot \frac{2}{1} = \frac{25 \cdot 1}{13 \cdot 1} = 1 \frac{12}{13} \quad \text{b) } \frac{7}{10} : \frac{9}{14} = \frac{7}{10} \cdot \frac{14}{9} = \frac{7 \cdot 7}{5 \cdot 9} = 1 \frac{4}{45}$$

$$\text{c) } \frac{5}{18} : \frac{5}{6} = \frac{5}{18} \cdot \frac{6}{5} = \frac{1 \cdot 1}{3 \cdot 1} = \frac{1}{3} \quad \text{d) } \frac{3}{11} : \frac{6}{31} = \frac{3}{11} \cdot \frac{31}{6} = \frac{1 \cdot 31}{11 \cdot 2} = 1 \frac{9}{22}$$

$$\textcircled{5} \quad \text{a) } \frac{4}{35} : \frac{1}{25} = \frac{4}{35} \cdot \frac{25}{1} = \frac{4 \cdot 5}{7 \cdot 1} = 2 \frac{6}{7} \quad \text{b) } \frac{3}{23} : \frac{3}{14} = \frac{3}{23} \cdot \frac{14}{3} = \frac{1 \cdot 14}{23 \cdot 1} = \frac{14}{23}$$

$$\text{c) } \frac{1}{9} : \frac{2}{15} = \frac{1}{9} \cdot \frac{15}{2} = \frac{1 \cdot 5}{3 \cdot 2} = \frac{5}{6} \quad \text{d) } \frac{1}{4} : \frac{1}{20} = \frac{1}{4} \cdot \frac{20}{1} = \frac{1 \cdot 5}{1 \cdot 1} = 5$$