

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

① a) $\frac{1}{42} : \frac{1}{4} =$

b) $\frac{2}{5} : \frac{10}{31} =$

c) $\frac{6}{17} : \frac{2}{11} =$

d) $\frac{5}{8} : \frac{9}{10} =$

② a) $\frac{19}{21} : \frac{1}{3} =$

b) $\frac{3}{4} : \frac{7}{16} =$

c) $\frac{3}{32} : \frac{3}{20} =$

d) $\frac{1}{36} : \frac{1}{28} =$

③ a) $\frac{7}{10} : \frac{7}{11} =$

b) $\frac{2}{9} : \frac{2}{31} =$

c) $\frac{8}{23} : \frac{4}{7} =$

d) $\frac{3}{16} : \frac{1}{8} =$

④ a) $\frac{15}{17} : \frac{5}{6} =$

b) $\frac{1}{3} : \frac{8}{9} =$

c) $\frac{1}{2} : \frac{29}{44} =$

d) $\frac{3}{28} : \frac{1}{21} =$

⑤ a) $\frac{6}{7} : \frac{8}{11} =$

b) $\frac{3}{14} : \frac{5}{18} =$

c) $\frac{4}{25} : \frac{4}{23} =$

d) $\frac{29}{39} : \frac{2}{3} =$

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

$$\textcircled{1} \quad \text{a) } \frac{1}{42} : \frac{1}{4} = \frac{1}{42} \cdot \frac{4}{1} = \frac{1 \cdot 4}{21 \cdot 1} = \frac{2}{21} \quad \text{b) } \frac{2}{5} : \frac{10}{31} = \frac{2}{5} \cdot \frac{31}{10} = \frac{1 \cdot 31}{5 \cdot 5} = 1 \frac{6}{25}$$

$$\text{c) } \frac{6}{17} : \frac{2}{11} = \frac{6}{17} \cdot \frac{11}{2} = \frac{3 \cdot 11}{17 \cdot 1} = 1 \frac{16}{17} \quad \text{d) } \frac{5}{8} : \frac{9}{10} = \frac{5}{8} \cdot \frac{10}{9} = \frac{5 \cdot 5}{4 \cdot 9} = \frac{25}{36}$$

$$\textcircled{2} \quad \text{a) } \frac{19}{21} : \frac{1}{3} = \frac{19}{21} \cdot \frac{3}{1} = \frac{19 \cdot 1}{7 \cdot 1} = 2 \frac{5}{7} \quad \text{b) } \frac{3}{4} : \frac{7}{16} = \frac{3}{4} \cdot \frac{16}{7} = \frac{3 \cdot 4}{1 \cdot 7} = 1 \frac{5}{7}$$

$$\text{c) } \frac{3}{32} : \frac{3}{20} = \frac{3}{32} \cdot \frac{20}{3} = \frac{1 \cdot 5}{8 \cdot 1} = \frac{5}{8} \quad \text{d) } \frac{1}{36} : \frac{1}{28} = \frac{1}{36} \cdot \frac{28}{1} = \frac{1 \cdot 7}{9 \cdot 1} = \frac{7}{9}$$

$$\textcircled{3} \quad \text{a) } \frac{7}{10} : \frac{7}{11} = \frac{7}{10} \cdot \frac{11}{7} = \frac{1 \cdot 11}{10 \cdot 1} = 1 \frac{1}{10} \quad \text{b) } \frac{2}{9} : \frac{2}{31} = \frac{2}{9} \cdot \frac{31}{2} = \frac{1 \cdot 31}{9 \cdot 1} = 3 \frac{4}{9}$$

$$\text{c) } \frac{8}{23} : \frac{4}{7} = \frac{8}{23} \cdot \frac{7}{4} = \frac{2 \cdot 7}{23 \cdot 1} = \frac{14}{23} \quad \text{d) } \frac{3}{16} : \frac{1}{8} = \frac{3}{16} \cdot \frac{8}{1} = \frac{3 \cdot 1}{2 \cdot 1} = 1 \frac{1}{2}$$

$$\textcircled{4} \quad \text{a) } \frac{15}{17} : \frac{5}{6} = \frac{15}{17} \cdot \frac{6}{5} = \frac{3 \cdot 6}{17 \cdot 1} = 1 \frac{1}{17} \quad \text{b) } \frac{1}{3} : \frac{8}{9} = \frac{1}{3} \cdot \frac{9}{8} = \frac{1 \cdot 3}{1 \cdot 8} = \frac{3}{8}$$

$$\text{c) } \frac{1}{2} : \frac{29}{44} = \frac{1}{2} \cdot \frac{44}{29} = \frac{1 \cdot 22}{1 \cdot 29} = \frac{22}{29} \quad \text{d) } \frac{3}{28} : \frac{1}{21} = \frac{3}{28} \cdot \frac{21}{1} = \frac{3 \cdot 3}{4 \cdot 1} = 2 \frac{1}{4}$$

$$\textcircled{5} \quad \text{a) } \frac{6}{7} : \frac{8}{11} = \frac{6}{7} \cdot \frac{11}{8} = \frac{3 \cdot 11}{7 \cdot 4} = 1 \frac{5}{28} \quad \text{b) } \frac{3}{14} : \frac{5}{18} = \frac{3}{14} \cdot \frac{18}{5} = \frac{3 \cdot 9}{7 \cdot 5} = \frac{27}{35}$$

$$\text{c) } \frac{4}{25} : \frac{4}{23} = \frac{4}{25} \cdot \frac{23}{4} = \frac{1 \cdot 23}{25 \cdot 1} = \frac{23}{25} \quad \text{d) } \frac{29}{39} : \frac{2}{3} = \frac{29}{39} \cdot \frac{3}{2} = \frac{29 \cdot 1}{13 \cdot 2} = 1 \frac{3}{26}$$