

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

① a) $\frac{4}{13} : \frac{4}{21} =$

b) $\frac{8}{9} : \frac{5}{9} =$

c) $\frac{8}{19} : \frac{2}{3} =$

d) $\frac{2}{5} : \frac{4}{43} =$

② a) $\frac{3}{32} : \frac{1}{20} =$

b) $\frac{1}{10} : \frac{5}{16} =$

c) $\frac{2}{23} : \frac{4}{31} =$

d) $\frac{15}{19} : \frac{3}{4} =$

③ a) $\frac{6}{11} : \frac{2}{7} =$

b) $\frac{7}{27} : \frac{1}{3} =$

c) $\frac{3}{28} : \frac{3}{10} =$

d) $\frac{4}{9} : \frac{10}{23} =$

④ a) $\frac{1}{2} : \frac{1}{14} =$

b) $\frac{5}{7} : \frac{6}{7} =$

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

d) $\frac{4}{33} : \frac{1}{21} =$

⑤ a) $\frac{1}{9} : \frac{2}{27} =$

b) $\frac{1}{5} : \frac{4}{15} =$

c) $\frac{1}{40} : \frac{1}{18} =$

d) $\frac{2}{19} : \frac{2}{41} =$

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

$$\textcircled{1} \quad \text{a) } \frac{4}{13} : \frac{4}{21} = \frac{4}{13} \cdot \frac{21}{4} = \frac{1 \cdot 21}{13 \cdot 1} = 1 \frac{8}{13} \quad \text{b) } \frac{8}{9} : \frac{5}{9} = \frac{8}{9} \cdot \frac{9}{5} = \frac{8 \cdot 1}{1 \cdot 5} = 1 \frac{3}{5}$$

$$\text{c) } \frac{8}{19} : \frac{2}{3} = \frac{8}{19} \cdot \frac{3}{2} = \frac{4 \cdot 3}{19 \cdot 1} = \frac{12}{19} \quad \text{d) } \frac{2}{5} : \frac{4}{43} = \frac{2}{5} \cdot \frac{43}{4} = \frac{1 \cdot 43}{5 \cdot 2} = 4 \frac{3}{10}$$

$$\textcircled{2} \quad \text{a) } \frac{3}{32} : \frac{1}{20} = \frac{3}{32} \cdot \frac{20}{1} = \frac{3 \cdot 5}{8 \cdot 1} = 1 \frac{7}{8} \quad \text{b) } \frac{1}{10} : \frac{5}{16} = \frac{1}{10} \cdot \frac{16}{5} = \frac{1 \cdot 8}{5 \cdot 5} = \frac{8}{25}$$

$$\text{c) } \frac{2}{23} : \frac{4}{31} = \frac{2}{23} \cdot \frac{31}{4} = \frac{1 \cdot 31}{23 \cdot 2} = \frac{31}{46} \quad \text{d) } \frac{15}{19} : \frac{3}{4} = \frac{15}{19} \cdot \frac{4}{3} = \frac{5 \cdot 4}{19 \cdot 1} = 1 \frac{1}{19}$$

$$\textcircled{3} \quad \text{a) } \frac{6}{11} : \frac{2}{7} = \frac{6}{11} \cdot \frac{7}{2} = \frac{3 \cdot 7}{11 \cdot 1} = 1 \frac{10}{11} \quad \text{b) } \frac{7}{27} : \frac{1}{3} = \frac{7}{27} \cdot \frac{3}{1} = \frac{7 \cdot 1}{9 \cdot 1} = \frac{7}{9}$$

$$\text{c) } \frac{3}{28} : \frac{3}{10} = \frac{3}{28} \cdot \frac{10}{3} = \frac{1 \cdot 5}{14 \cdot 1} = \frac{5}{14} \quad \text{d) } \frac{4}{9} : \frac{10}{23} = \frac{4}{9} \cdot \frac{23}{10} = \frac{2 \cdot 23}{9 \cdot 5} = 1 \frac{1}{45}$$

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

$$\text{c) } \frac{2}{3} : \frac{26}{29} = \frac{2}{3} \cdot \frac{29}{26} = \frac{1 \cdot 29}{3 \cdot 13} = \frac{29}{39} \quad \text{d) } \frac{4}{33} : \frac{1}{21} = \frac{4}{33} \cdot \frac{21}{1} = \frac{4 \cdot 7}{11 \cdot 1} = 2 \frac{6}{11}$$

$$\textcircled{5} \quad \text{a) } \frac{1}{9} : \frac{2}{27} = \frac{1}{9} \cdot \frac{27}{2} = \frac{1 \cdot 3}{1 \cdot 2} = 1 \frac{1}{2} \quad \text{b) } \frac{1}{5} : \frac{4}{15} = \frac{1}{5} \cdot \frac{15}{4} = \frac{1 \cdot 3}{1 \cdot 4} = \frac{3}{4}$$

$$\text{c) } \frac{1}{40} : \frac{1}{18} = \frac{1}{40} \cdot \frac{18}{1} = \frac{1 \cdot 9}{20 \cdot 1} = \frac{9}{20} \quad \text{d) } \frac{2}{19} : \frac{2}{41} = \frac{2}{19} \cdot \frac{41}{2} = \frac{1 \cdot 41}{19 \cdot 1} = 2 \frac{3}{19}$$