

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

① a) $\frac{3}{7} : \frac{9}{31} =$

b) $\frac{11}{16} : \frac{1}{2} =$

c) $\frac{4}{19} : \frac{4}{17} =$

d) $\frac{1}{9} : \frac{2}{45} =$

② a) $\frac{20}{27} : \frac{1}{3} =$

b) $\frac{2}{25} : \frac{3}{5} =$

c) $\frac{1}{4} : \frac{17}{44} =$

d) $\frac{8}{11} : \frac{4}{9} =$

③ a) $\frac{2}{31} : \frac{2}{43} =$

b) $\frac{15}{32} : \frac{1}{2} =$

c) $\frac{2}{13} : \frac{4}{17} =$

d) $\frac{2}{3} : \frac{2}{35} =$

④ a) $\frac{3}{5} : \frac{11}{30} =$

b) $\frac{3}{29} : \frac{3}{10} =$

c) $\frac{2}{39} : \frac{2}{11} =$

d) $\frac{17}{38} : \frac{1}{4} =$

⑤ a) $\frac{1}{6} : \frac{7}{45} =$

b) $\frac{7}{32} : \frac{3}{8} =$

c) $\frac{2}{37} : \frac{1}{37} =$

d) $\frac{1}{3} : \frac{5}{24} =$

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

$$\textcircled{1} \quad \text{a) } \frac{3}{7} : \frac{9}{31} = \frac{3}{7} \cdot \frac{31}{9} = \frac{1 \cdot 31}{7 \cdot 3} = 1 \frac{10}{21} \quad \text{b) } \frac{11}{16} : \frac{1}{2} = \frac{11}{16} \cdot \frac{2}{1} = \frac{11 \cdot 1}{8 \cdot 1} = 1 \frac{3}{8}$$

$$\text{c) } \frac{4}{19} : \frac{4}{17} = \frac{4}{19} \cdot \frac{17}{4} = \frac{1 \cdot 17}{19 \cdot 1} = \frac{17}{19} \quad \text{d) } \frac{1}{9} : \frac{2}{45} = \frac{1}{9} \cdot \frac{45}{2} = \frac{1 \cdot 5}{1 \cdot 2} = 2 \frac{1}{2}$$

$$\textcircled{2} \quad \text{a) } \frac{20}{27} : \frac{1}{3} = \frac{20}{27} \cdot \frac{3}{1} = \frac{20 \cdot 1}{9 \cdot 1} = 2 \frac{2}{9} \quad \text{b) } \frac{2}{25} : \frac{3}{5} = \frac{2}{25} \cdot \frac{5}{3} = \frac{2 \cdot 1}{5 \cdot 3} = \frac{2}{15}$$

$$\text{c) } \frac{1}{4} : \frac{17}{44} = \frac{1}{4} \cdot \frac{44}{17} = \frac{1 \cdot 11}{1 \cdot 17} = \frac{11}{17} \quad \text{d) } \frac{8}{11} : \frac{4}{9} = \frac{8}{11} \cdot \frac{9}{4} = \frac{2 \cdot 9}{11 \cdot 1} = 1 \frac{7}{11}$$

$$\textcircled{3} \quad \text{a) } \frac{2}{31} : \frac{2}{43} = \frac{2}{31} \cdot \frac{43}{2} = \frac{1 \cdot 43}{31 \cdot 1} = 1 \frac{12}{31} \quad \text{b) } \frac{15}{32} : \frac{1}{2} = \frac{15}{32} \cdot \frac{2}{1} = \frac{15 \cdot 1}{16 \cdot 1} = \frac{15}{16}$$

$$\text{c) } \frac{2}{13} : \frac{4}{17} = \frac{2}{13} \cdot \frac{17}{4} = \frac{1 \cdot 17}{13 \cdot 2} = \frac{17}{26} \quad \text{d) } \frac{2}{3} : \frac{2}{35} = \frac{2}{3} \cdot \frac{35}{2} = \frac{1 \cdot 35}{3 \cdot 1} = 11 \frac{2}{3}$$

$$\textcircled{4} \quad \text{a) } \frac{3}{5} : \frac{11}{30} = \frac{3}{5} \cdot \frac{30}{11} = \frac{3 \cdot 6}{1 \cdot 11} = 1 \frac{7}{11} \quad \text{b) } \frac{3}{29} : \frac{3}{10} = \frac{3}{29} \cdot \frac{10}{3} = \frac{1 \cdot 10}{29 \cdot 1} = \frac{10}{29}$$

$$\text{c) } \frac{2}{39} : \frac{2}{11} = \frac{2}{39} \cdot \frac{11}{2} = \frac{1 \cdot 11}{39 \cdot 1} = \frac{11}{39} \quad \text{d) } \frac{17}{38} : \frac{1}{4} = \frac{17}{38} \cdot \frac{4}{1} = \frac{17 \cdot 2}{19 \cdot 1} = 1 \frac{15}{19}$$

$$\textcircled{5} \quad \text{a) } \frac{1}{6} : \frac{7}{45} = \frac{1}{6} \cdot \frac{45}{7} = \frac{1 \cdot 15}{2 \cdot 7} = 1 \frac{1}{14} \quad \text{b) } \frac{7}{32} : \frac{3}{8} = \frac{7}{32} \cdot \frac{8}{3} = \frac{7 \cdot 1}{4 \cdot 3} = \frac{7}{12}$$

$$\text{c) } \frac{2}{37} : \frac{1}{37} = \frac{2}{37} \cdot \frac{37}{1} = \frac{2 \cdot 1}{1 \cdot 1} = 2 \quad \text{d) } \frac{1}{3} : \frac{5}{24} = \frac{1}{3} \cdot \frac{24}{5} = \frac{1 \cdot 8}{1 \cdot 5} = 1 \frac{3}{5}$$