

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

① a) $\frac{3}{31} : \frac{3}{7} =$

b) $\frac{2}{3} : \frac{19}{30} =$

c) $\frac{10}{13} : \frac{5}{9} =$

d) $\frac{4}{15} : \frac{6}{11} =$

② a) $\frac{25}{38} : \frac{1}{4} =$

b) $\frac{3}{5} : \frac{15}{31} =$

c) $\frac{9}{20} : \frac{5}{6} =$

d) $\frac{7}{15} : \frac{2}{9} =$

③ a) $\frac{2}{19} : \frac{4}{39} =$

b) $\frac{2}{21} : \frac{3}{28} =$

c) $\frac{4}{13} : \frac{6}{13} =$

d) $\frac{1}{4} : \frac{7}{34} =$

④ a) $\frac{3}{5} : \frac{3}{14} =$

b) $\frac{3}{10} : \frac{5}{12} =$

c) $\frac{2}{15} : \frac{2}{25} =$

d) $\frac{2}{7} : \frac{6}{37} =$

⑤ a) $\frac{4}{45} : \frac{1}{9} =$

b) $\frac{3}{20} : \frac{3}{31} =$

c) $\frac{29}{36} : \frac{2}{3} =$

d) $\frac{1}{10} : \frac{7}{32} =$

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

$$\textcircled{1} \quad \text{a) } \frac{3}{31} : \frac{3}{7} = \frac{3}{31} \cdot \frac{7}{3} = \frac{1 \cdot 7}{31 \cdot 1} = \frac{7}{31} \quad \text{b) } \frac{2}{3} : \frac{19}{30} = \frac{2}{3} \cdot \frac{30}{19} = \frac{2 \cdot 10}{1 \cdot 19} = 1 \frac{1}{19}$$

$$\text{c) } \frac{10}{13} : \frac{5}{9} = \frac{10}{13} \cdot \frac{9}{5} = \frac{2 \cdot 9}{13 \cdot 1} = 1 \frac{5}{13} \quad \text{d) } \frac{4}{15} : \frac{6}{11} = \frac{4}{15} \cdot \frac{11}{6} = \frac{2 \cdot 11}{15 \cdot 3} = \frac{22}{45}$$

$$\textcircled{2} \quad \text{a) } \frac{25}{38} : \frac{1}{4} = \frac{25}{38} \cdot \frac{4}{1} = \frac{25 \cdot 2}{19 \cdot 1} = 2 \frac{12}{19} \quad \text{b) } \frac{3}{5} : \frac{15}{31} = \frac{3}{5} \cdot \frac{31}{15} = \frac{1 \cdot 31}{5 \cdot 5} = 1 \frac{6}{25}$$

$$\text{c) } \frac{9}{20} : \frac{5}{6} = \frac{9}{20} \cdot \frac{6}{5} = \frac{9 \cdot 3}{10 \cdot 5} = \frac{27}{50} \quad \text{d) } \frac{7}{15} : \frac{2}{9} = \frac{7}{15} \cdot \frac{9}{2} = \frac{7 \cdot 3}{5 \cdot 2} = 2 \frac{1}{10}$$

$$\textcircled{3} \quad \text{a) } \frac{2}{19} : \frac{4}{39} = \frac{2}{19} \cdot \frac{39}{4} = \frac{1 \cdot 39}{19 \cdot 2} = 1 \frac{1}{38} \quad \text{b) } \frac{2}{21} : \frac{3}{28} = \frac{2}{21} \cdot \frac{28}{3} = \frac{2 \cdot 4}{3 \cdot 3} = \frac{8}{9}$$

$$\text{c) } \frac{4}{13} : \frac{6}{13} = \frac{4}{13} \cdot \frac{13}{6} = \frac{2 \cdot 1}{1 \cdot 3} = \frac{2}{3} \quad \text{d) } \frac{1}{4} : \frac{7}{34} = \frac{1}{4} \cdot \frac{34}{7} = \frac{1 \cdot 17}{2 \cdot 7} = 1 \frac{3}{14}$$

$$\textcircled{4} \quad \text{a) } \frac{3}{5} : \frac{3}{14} = \frac{3}{5} \cdot \frac{14}{3} = \frac{1 \cdot 14}{5 \cdot 1} = 2 \frac{4}{5} \quad \text{b) } \frac{3}{10} : \frac{5}{12} = \frac{3}{10} \cdot \frac{12}{5} = \frac{3 \cdot 6}{5 \cdot 5} = \frac{18}{25}$$

$$\text{c) } \frac{2}{15} : \frac{2}{25} = \frac{2}{15} \cdot \frac{25}{2} = \frac{1 \cdot 5}{3 \cdot 1} = 1 \frac{2}{3} \quad \text{d) } \frac{2}{7} : \frac{6}{37} = \frac{2}{7} \cdot \frac{37}{6} = \frac{1 \cdot 37}{7 \cdot 3} = 1 \frac{16}{21}$$

$$\textcircled{5} \quad \text{a) } \frac{4}{45} : \frac{1}{9} = \frac{4}{45} \cdot \frac{9}{1} = \frac{4 \cdot 1}{5 \cdot 1} = \frac{4}{5} \quad \text{b) } \frac{3}{20} : \frac{3}{31} = \frac{3}{20} \cdot \frac{31}{3} = \frac{1 \cdot 31}{20 \cdot 1} = 1 \frac{11}{20}$$

$$\text{c) } \frac{29}{36} : \frac{2}{3} = \frac{29}{36} \cdot \frac{3}{2} = \frac{29 \cdot 1}{12 \cdot 2} = 1 \frac{5}{24} \quad \text{d) } \frac{1}{10} : \frac{7}{32} = \frac{1}{10} \cdot \frac{32}{7} = \frac{1 \cdot 16}{5 \cdot 7} = \frac{16}{35}$$