

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

① a) $\frac{1}{22} : \frac{1}{30} =$

b) $\frac{14}{15} : \frac{4}{5} =$

c) $\frac{5}{8} : \frac{10}{13} =$

d) $\frac{1}{21} : \frac{2}{21} =$

② a) $\frac{3}{4} : \frac{7}{16} =$

b) $\frac{2}{5} : \frac{16}{45} =$

c) $\frac{2}{7} : \frac{5}{14} =$

d) $\frac{2}{3} : \frac{23}{30} =$

③ a) $\frac{5}{18} : \frac{1}{12} =$

b) $\frac{8}{35} : \frac{2}{9} =$

c) $\frac{1}{2} : \frac{23}{40} =$

d) $\frac{1}{30} : \frac{3}{34} =$

④ a) $\frac{11}{14} : \frac{1}{7} =$

b) $\frac{14}{23} : \frac{2}{5} =$

c) $\frac{3}{28} : \frac{3}{17} =$

d) $\frac{1}{12} : \frac{7}{9} =$

⑤ a) $\frac{5}{8} : \frac{1}{10} =$

b) $\frac{4}{25} : \frac{2}{13} =$

c) $\frac{2}{11} : \frac{4}{7} =$

d) $\frac{1}{6} : \frac{5}{26} =$

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

$$\textcircled{1} \quad \text{a) } \frac{1}{22} : \frac{1}{30} = \frac{1}{22} \cdot \frac{30}{1} = \frac{1 \cdot 15}{11 \cdot 1} = 1 \frac{4}{11} \quad \text{b) } \frac{14}{15} : \frac{4}{5} = \frac{14}{15} \cdot \frac{5}{4} = \frac{7 \cdot 1}{3 \cdot 2} = 1 \frac{1}{6}$$

$$\text{c) } \frac{5}{8} : \frac{10}{13} = \frac{5}{8} \cdot \frac{13}{10} = \frac{1 \cdot 13}{8 \cdot 2} = \frac{13}{16} \quad \text{d) } \frac{1}{21} : \frac{2}{21} = \frac{1}{21} \cdot \frac{21}{2} = \frac{1 \cdot 1}{1 \cdot 2} = \frac{1}{2}$$

$$\textcircled{2} \quad \text{a) } \frac{3}{4} : \frac{7}{16} = \frac{3}{4} \cdot \frac{16}{7} = \frac{3 \cdot 4}{1 \cdot 7} = 1 \frac{5}{7} \quad \text{b) } \frac{2}{5} : \frac{16}{45} = \frac{2}{5} \cdot \frac{45}{16} = \frac{1 \cdot 9}{1 \cdot 8} = 1 \frac{1}{8}$$

$$\text{c) } \frac{2}{7} : \frac{5}{14} = \frac{2}{7} \cdot \frac{14}{5} = \frac{2 \cdot 2}{1 \cdot 5} = \frac{4}{5} \quad \text{d) } \frac{2}{3} : \frac{23}{30} = \frac{2}{3} \cdot \frac{30}{23} = \frac{2 \cdot 10}{1 \cdot 23} = \frac{20}{23}$$

$$\textcircled{3} \quad \text{a) } \frac{5}{18} : \frac{1}{12} = \frac{5}{18} \cdot \frac{12}{1} = \frac{5 \cdot 2}{3 \cdot 1} = 3 \frac{1}{3} \quad \text{b) } \frac{8}{35} : \frac{2}{9} = \frac{8}{35} \cdot \frac{9}{2} = \frac{4 \cdot 9}{35 \cdot 1} = 1 \frac{1}{35}$$

$$\text{c) } \frac{1}{2} : \frac{23}{40} = \frac{1}{2} \cdot \frac{40}{23} = \frac{1 \cdot 20}{1 \cdot 23} = \frac{20}{23} \quad \text{d) } \frac{1}{30} : \frac{3}{34} = \frac{1}{30} \cdot \frac{34}{3} = \frac{1 \cdot 17}{15 \cdot 3} = \frac{17}{45}$$

$$\textcircled{4} \quad \text{a) } \frac{11}{14} : \frac{1}{7} = \frac{11}{14} \cdot \frac{7}{1} = \frac{11 \cdot 1}{2 \cdot 1} = 5 \frac{1}{2} \quad \text{b) } \frac{14}{23} : \frac{2}{5} = \frac{14}{23} \cdot \frac{5}{2} = \frac{7 \cdot 5}{23 \cdot 1} = 1 \frac{12}{23}$$

$$\text{c) } \frac{3}{28} : \frac{3}{17} = \frac{3}{28} \cdot \frac{17}{3} = \frac{1 \cdot 17}{28 \cdot 1} = \frac{17}{28} \quad \text{d) } \frac{1}{12} : \frac{7}{9} = \frac{1}{12} \cdot \frac{9}{7} = \frac{1 \cdot 3}{4 \cdot 7} = \frac{3}{28}$$

$$\textcircled{5} \quad \text{a) } \frac{5}{8} : \frac{1}{10} = \frac{5}{8} \cdot \frac{10}{1} = \frac{5 \cdot 5}{4 \cdot 1} = 6 \frac{1}{4} \quad \text{b) } \frac{4}{25} : \frac{2}{13} = \frac{4}{25} \cdot \frac{13}{2} = \frac{2 \cdot 13}{25 \cdot 1} = 1 \frac{1}{25}$$

$$\text{c) } \frac{2}{11} : \frac{4}{7} = \frac{2}{11} \cdot \frac{7}{4} = \frac{1 \cdot 7}{11 \cdot 2} = \frac{7}{22} \quad \text{d) } \frac{1}{6} : \frac{5}{26} = \frac{1}{6} \cdot \frac{26}{5} = \frac{1 \cdot 13}{3 \cdot 5} = \frac{13}{15}$$