

# Ausführliche Lösung zu Ü3 - Bp. 1-4

$$1) a) \frac{3}{4} + \frac{2}{5} = \frac{15}{20} + \frac{8}{20} = \frac{23}{20} = 1 \frac{3}{20}$$

$$b) \frac{7}{9} + \frac{5}{6} = \frac{14}{18} + \frac{15}{18} = \frac{29}{18} = 1 \frac{11}{18}$$

$$\text{oder: } \frac{42}{54} + \frac{45}{54} = \frac{87}{54} = 1 \frac{33}{54} = 1 \frac{11}{18}$$

$$c) 3 \frac{4}{5} + 2 \frac{1}{3} = \frac{19}{5} + \frac{7}{3} = \frac{57}{15} + \frac{35}{15} = \frac{92}{15} = 6 \frac{2}{15}$$

$$d) 3 - \frac{3}{4} = \frac{12}{4} - \frac{3}{4} = \frac{9}{4} = 2 \frac{1}{4}$$

$$e) 4 \frac{1}{2} - 1 \frac{2}{3} = \frac{9}{2} - \frac{5}{3} = \frac{27}{6} - \frac{10}{6} = \frac{17}{6} = 2 \frac{5}{6}$$

$$f) 2 \frac{1}{8} - \frac{3}{4} = \frac{17}{8} - \frac{6}{8} = \frac{11}{8} = 1 \frac{3}{8}$$

$$2) a) \frac{3}{4} \cdot \frac{6}{7} = \frac{18}{28} = \frac{9}{14}$$

$$b) \frac{5}{6} \cdot \frac{2}{15} = \frac{10}{90} = \frac{1}{9}$$

$$c) 1 \frac{3}{4} \cdot 2 \frac{2}{5} = \frac{7}{4} \cdot \frac{12}{5} = \frac{21}{5} = 4 \frac{1}{5}$$

$$d) 3 \frac{3}{4} \cdot 1 \frac{3}{5} = \frac{15}{4} \cdot \frac{8}{5} = \frac{6}{1} = 6$$

$$3) a) \frac{3}{10} : \frac{2}{5} = \frac{3}{10} \cdot \frac{5}{2} = \frac{15}{20} = \frac{3}{4}$$

$$b) \frac{3}{8} : \frac{5}{12} = \frac{3}{8} \cdot \frac{12}{5} = \frac{9}{10}$$

$$c) 2 \frac{3}{4} : 1 \frac{1}{8} = \frac{11}{4} : \frac{9}{8} = \frac{11}{4} \cdot \frac{8}{9} = \frac{22}{9} = 2 \frac{4}{9}$$

$$d) \frac{9}{10} : 3 \frac{3}{5} = \frac{9}{10} : \frac{18}{5} = \frac{9}{10} \cdot \frac{5}{18} = \frac{1}{4}$$

$$4) a) 45 \cdot \frac{2}{3} = \frac{15}{1} \cdot \frac{2}{3} = \frac{30}{1} = 30$$

$$b) 12 \frac{1}{4} \cdot \frac{3}{4} = \frac{49}{4} \cdot \frac{3}{4} = \frac{147}{16} = 9 \frac{3}{16}$$

$$c) 25 \cdot \frac{3}{5} = \frac{25}{1} \cdot \frac{3}{5} = \frac{75}{5} = 15$$

$$d) \frac{2}{5} \cdot \frac{7}{9} = \frac{14}{45}$$