

Lösungen zu den Hausaufgaben II

1 a) $\frac{27}{4}$

b) $-\frac{1}{7} \cdot \frac{3}{4} = -\frac{3}{28}$

c) $\left(-\frac{4}{9}\right) \cdot \left(-\frac{1}{12}\right) = \left(-\frac{1}{9}\right) \cdot \left(-\frac{1}{3}\right) = \frac{1}{27}$

d) $\frac{4}{5} : \frac{1}{3} = \frac{4}{5} \cdot 3 = \frac{12}{5}$

2 a) $-\frac{2}{7} + \left(-\frac{12}{7}\right) = -\frac{2}{7} - \frac{12}{7} = -\frac{14}{7}$

b) $\frac{5}{12} \cdot \frac{8}{7} + \frac{7}{3} = \frac{10}{21} + \frac{7}{3} = \frac{10}{21} + \frac{49}{21} = \frac{59}{21}$

c) $-\frac{3}{16} \cdot \left(\frac{4}{9} - \frac{3}{9}\right) = -\frac{3}{16} \cdot \frac{1}{9} = -\frac{1}{48}$

d) $\left(-\frac{25}{12} - \frac{10}{12}\right) : \left(-\frac{5}{24}\right) = \left(-\frac{35}{12}\right) \cdot \left(-\frac{24}{5}\right) = -7 \cdot 2 = 14$

e) $\frac{5}{14} \cdot \frac{7}{5} + \frac{5}{14} \cdot \frac{28}{5} = \frac{1}{2} + 2 = \frac{5}{2}$

f) $\frac{6}{11} \cdot \left(\frac{5}{9} - \frac{7}{9}\right) = \frac{6}{11} \cdot \left(-\frac{2}{9}\right) = -\frac{4}{33}$

3 $3,276 \cdot 10 = \mathbf{32,76} : 10^2 = \mathbf{0,3276} \cdot 10\,000$
 $= \mathbf{3276} : 10^3 = \mathbf{3,276} \cdot 100\,000 = \mathbf{327\,600}$

4 a) 0,7289
c) -0,903

b) 7,254
d) -9,936