

3. UMRECHNEN VON ZUSAMMENGESETZTEN GRÖSSEN

3.1 a) $30 \frac{\text{km}}{\text{h}} = \frac{30 \text{ km}}{60 \text{ min}} = \frac{30'000 \text{ m}}{3'600 \text{ s}} = \underline{\underline{8,3\bar{3} \frac{\text{m}}{\text{s}}}}$

b) $\underline{\underline{1000 \frac{\text{m}}{\text{min}}}}$

c) $\underline{\underline{1'188 \frac{\text{km}}{\text{h}}}}$

3.2 a) $\underline{\underline{175 \frac{\text{g}}{\text{dl}}}}$

b) $\underline{\underline{1 \frac{\text{kg}}{\text{m}^2}}}$

c)

3.3 $1 \text{ dm}^2 \hat{=} \left| \frac{1,2 \text{ cl} \cdot 100 \text{ dm}^2}{? \cdot 1 \text{ dm}^2} \right. = 120 \text{ cl} = 12 \text{ dl} = \underline{\underline{1,2 \text{ l}}}$

3.4 a) $\underline{\underline{13,9 \frac{\text{m}}{\text{s}}}}$

f) $\underline{\underline{1,7 \frac{\text{cm}}{\text{min}}}}$

b) $\underline{\underline{1'833,3 \frac{\text{m}}{\text{min}}}}$

g) $\underline{\underline{58,3 \frac{\text{m}}{\text{s}}}}$

c) $\underline{\underline{3,6 \frac{\text{km}}{\text{h}}}}$

h) $\underline{\underline{360 \frac{\text{km}}{\text{h}}}}$

d) $\underline{\underline{35,6 \frac{\text{km}}{\text{h}}}}$

i) $\underline{\underline{5,6 \frac{\text{m}}{\text{s}}}}$

e) $\underline{\underline{1'666,7 \frac{\text{km}}{\text{h}}}}$

3.5 a) $\underline{\underline{12 \frac{\text{t}}{\text{km}}}}$

f) $\underline{\underline{1,2 \frac{\text{t}}{\text{h}}}}$

b) $\underline{\underline{2500 \frac{\text{t}}{\text{m}^2}}}$

g) $\underline{\underline{0,22 \frac{\text{dl}}{\text{dm}^2}}}$

c) $\underline{\underline{980'000 \frac{\text{Fr.}}{\text{ha}}}}$

h) $\underline{\underline{1'230 \frac{\text{g}}{\text{l}}}}$

d) $\underline{\underline{8,5 \frac{\text{kg}}{\text{dm}^3}}}$

i) $\underline{\underline{3 \frac{\text{Fr}}{\text{cl}}}}$

e) $\underline{\underline{40 \frac{\text{Rp}}{\text{min}}}}$

$$\begin{array}{l} \underline{3.6} \\ 1\text{m}^2 \hat{=} \\ 0,0001\text{m}^2 \hat{=} \end{array} \left| \frac{1,2\text{L} \cdot 0,0001\text{m}^2}{1\text{m}^2} \right. = 0,00012\text{L} = 0,0012\text{dl} = 0,012\text{cl} \\ = \underline{\underline{0,12 \frac{\text{ml}}{\text{cm}^2}}}$$

$$\begin{array}{l} \underline{3.7} \\ 12,2\text{s} \hat{=} \\ 3600\text{s} \hat{=} \end{array} \left| \frac{100\text{m} \cdot 3600\text{s}}{12,2\text{s}} \right. = 29'508,2\text{m} = 29,5\text{km}$$

⇒ sie rennt mit $29,5 \frac{\text{km}}{\text{h}}$ und könnte das Auto nicht einholen

$$\begin{array}{l} \underline{3.8} \\ 10\text{dl} \hat{=} \\ 1\text{dl} \hat{=} \end{array} \left| \frac{1,5\text{kg} \cdot 1\text{dl}}{10\text{dl}} \right. = 0,15\text{kg} = \underline{\underline{150\text{gr/dl}}}$$

$$\begin{array}{l} \underline{3.9} \\ 10000\text{m}^2 \hat{=} \\ 1\text{m}^2 \hat{=} \end{array} \left| \frac{12,5\text{t} \cdot 1\text{m}^2}{10000\text{m}^2} \right. = 0,00125\text{t} = \underline{\underline{1,25 \frac{\text{kg}}{\text{m}^2}}}$$

$$\begin{array}{l} \underline{3.10} \\ 60\text{min} \hat{=} \\ 1\text{min} \hat{=} \end{array} \left| \frac{1600\text{Rp} \cdot 1\text{min}}{? \cdot 60\text{min}} \right. = \underline{\underline{26,6\overline{6} \text{Rp/min}}}$$

$$\begin{array}{l} \underline{3.11} \\ 8760\text{h} \hat{=} \\ 1\text{h} \hat{=} \end{array} \left| \frac{940000000\text{km} \cdot 1\text{h}}{8760\text{h}} \right. = \underline{\underline{107'306 \frac{\text{km}}{\text{h}}}}$$

$$\begin{array}{l} \underline{3.12} \\ 1\text{m}^2 \hat{=} \\ 10000\text{m}^2 \hat{=} \end{array} \left| \frac{150\text{Fr.} \cdot 10'000\text{m}^2}{? \cdot 1\text{m}^2} \right. = \underline{\underline{1'500'000\text{Fr.}}}$$

$$\begin{array}{l} \underline{3.13} \\ 10\text{dl} \hat{=} \\ 1\text{dl} \hat{=} \end{array} \left| \frac{890\text{gr} \cdot 1\text{dl}}{? \cdot 10\text{dl}} \right. = \underline{\underline{89\text{gr}}}$$