2. Bez Dichte/Geschwindigkeit Lösungen AB 3

1. $m = \varrho \cdot V = \underline{\underline{500g}}$

2. $t = \frac{s}{v} = 0{,}20375h = 12{,}225min = \underline{\underline{12\,\text{min}\,13{,}5s}}$

3. $m = \varrho \cdot V = \underline{\underline{471{,}6g}}$

4. $V = \frac{m}{\varrho} = \underline{\underline{5dm^3}}$

5. $t = \frac{s}{v} = 2{,}08\overline{3}h = \underline{\underline{2h\ 5min}}$

6. $v = \frac{s}{t} = \frac{16{,}3}{0{,}25} = \underline{\underline{65{,}2km/h}}$

7. $v = \frac{s}{t} = \underline{\underline{1{,}7m/s}} = \underline{\underline{6km/h}}$

8. $v = \frac{s}{t} = \underline{\underline{10{,}1m/s}} = \underline{\underline{36{,}5km/h}}$

9. $m = \varrho \cdot V = \underline{\underline{300g}}$

10. $t = \frac{s}{v} = \underline{\underline{14{,}7s}}$

11. $t_1 = \frac{s}{v_1} = 2{,}\overline{857142}h = \underline{\underline{2h\ 51min}}$ $t_2 = \frac{s}{v_2} = 1{,}\overline{538461}h = \underline{\underline{1h\ 32min}}$

12. $V = \frac{m}{\varrho} = \underline{\underline{44cm^3}}$

13. $v = \frac{s}{t} = \underline{\underline{6{,}7m/s}} = \underline{\underline{24km/h}}$

14. $v = \frac{s}{t} = \underline{\underline{7{,}8m/s}} = \underline{\underline{28km/h}}$

15. $s = v \cdot t = \underline{\underline{7{,}5km}}$

16. $m = \varrho \cdot V = \underline{\underline{1050kg}}$

17. $v = \frac{s}{t} = \underline{\underline{720km/h}}$

18. $v_1 = \frac{s}{t_1} = \frac{100 \cdot 60}{70} = \underline{\underline{85{,}7km/h}}$ $v_2 = \frac{s}{t_2} = \frac{100 \cdot 60}{130} = \underline{\underline{46{,}2km/h}}$

19. $m = \varrho \cdot V = \underline{\underline{105kg}} \rightarrow nein$

20. $s = v \cdot t = \underline{\underline{1458m}}$