

RJEŠENJA ZADATAKA

1. (a) $56 \text{ dag} = 0,56 \text{ kg}$
 (b) $83 \text{ ml} = 83 \text{ cm}^3$
 (c) $2 \text{ g/cm}^3 = 2000 \text{ kg/m}^3$
 (d) $17,5 \text{ dm}^2 = 175000 \text{ mm}^2$
 (e) $305,2 \text{ cm} = 3,052 \text{ m}$
 (f) $1,29 \text{ kg/m}^3 = 0,00129 \text{ g/cm}^3$
 (g) $4 \text{ mm} = 0,04 \text{ dm}$
 (h) $25 \text{ mm}^2 = 0,00025 \text{ m}^2$
 (i) $324 \text{ mm}^3 = 0,000324 \text{ m}^3$
 (j) $37 \text{ g} = 0,037 \text{ kg}$
 (k) $2,5 \text{ l} = 2,5 \text{ dm}^3 = 2500 \text{ cm}^3$
 (l) $4500 \text{ mm}^3 = 4,5 \text{ cm}^3 = 4,5 \text{ ml} = 0,045 \text{ dl}$

2. $l_1 = 75 \text{ cm} = 0,75 \text{ m}$
 $l = 1200 \text{ m}$

$$n = l : l_1$$

$$n = 1200 \text{ m} : 0,75 \text{ m}$$

$$n = 1600$$

3. $n = 6$
 $d = 9 \text{ mm}$

$$d_1 = d : n$$

$$d_1 = 9 \text{ mm} : 6$$

$$d_1 = 1,5 \text{ mm}$$

4. $d = 24 \text{ mm}$
 $n = 368 \text{ str} : 2 = 184 \text{ lista}$

$$d_1 = d : n$$

$$d_1 = 24 \text{ mm} : 184$$

$$d_1 = 0,13 \text{ mm}$$

5. $l_1 = 80 \text{ cm}$
 $n = 256$

$$l = n \cdot l_1$$

$$l = 256 \cdot 80 \text{ cm}$$

$$l = 20480 \text{ cm}$$

6. $a = 67 \text{ dm} = 6,7 \text{ m}$
 $b = 562 \text{ cm} = 5,62 \text{ m}$

$$A = a \cdot b$$

$$A = 6,7 \text{ m} \cdot 5,62 \text{ m}$$

$$A = 37,654 \text{ m}^2$$

7. $a = 2,3 \text{ dm} = 23 \text{ cm}$

$$A = a \cdot a$$

$$A = 23 \text{ cm} \cdot 23 \text{ cm}$$

$$A = 529 \text{ cm}^2$$

8. $A_1 = 16 \text{ cm}^2$
 $a = 4,8 \text{ m} = 480 \text{ cm}$
 $b = 4 \text{ m} = 400 \text{ cm}$

$$A = ab$$

$$A = 480 \text{ cm} \cdot 400 \text{ cm}$$

$$A = 192000 \text{ cm}^2$$

$$n = A : A_1$$

$$n = 192000 \text{ cm}^2 : 16 \text{ cm}^2$$

$$n = 12000$$

9. $a = 45 \text{ cm} = 0,45 \text{ m}$
 $b = 340 \text{ mm} = 0,34 \text{ m}$
 $c = 1,35 \text{ m}$

$$V = abc$$

$$V = 0,45 \text{ m} \cdot 0,34 \text{ m} \cdot 1,35 \text{ m}$$

$$V = 0,20655 \text{ m}^3$$

$$V \approx 0,21 \text{ m}^3$$

10. $a = 35 \text{ cm}$

$$V = a \cdot a \cdot a$$

$$V = 35 \text{ cm} \cdot 35 \text{ cm} \cdot 35 \text{ cm}$$

$$V = 42875 \text{ cm}^3$$

11. $A = 7 \text{ cm}^2$
 $h = 12 \text{ cm}$

$$V = A \cdot h$$

$$V = 7 \text{ cm}^2 \cdot 12 \text{ cm}$$

$$V = 84 \text{ cm}^3$$

12. $A = 1,2 \text{ dm}^2$
 $V = 0,36 \text{ hl} = 36 \text{ l} = 36 \text{ dm}^3$

$$h = V : A$$

$$h = 36 \text{ dm}^3 : 1,2 \text{ dm}^2$$

$$h = 30 \text{ dm}$$

$$(13.) \quad V = 2,4 \text{ dm}^3 \\ h = 50 \text{ cm} = 5 \text{ dm}$$

$$A = V : h$$

$$A = 2,4 \text{ dm}^3 : 5 \text{ dm}$$

$$A = 0,48 \text{ dm}$$

$$(14.) \quad m(3 \text{ šnita}) = 22,5 \text{ dag}$$

$$m(1 \text{ šnita}) = m(3 \text{ šnita}) : 3$$

$$m(1 \text{ šnita}) = 22,5 \text{ dag} : 3$$

$$m(1 \text{ šnita}) = 7,5 \text{ dag}$$

$$m(\text{torte}) = 16 \cdot 7,5 \text{ dag}$$

$$m(\text{torte}) = 120 \text{ dag}$$

$$m(\text{torte}) = 1,2 \text{ kg}$$

$$(15.) \quad n = 12 \\ m_{z+b} = 56 \text{ dag} = 560 \text{ g} \\ m_z = 464 \text{ g}$$

$$m_b = m_{z+b} - m_z$$

$$m_b = 560 \text{ g} - 464 \text{ g}$$

$$m_b = 96 \text{ g}$$

$$m(1 \text{ bombona}) = m_b : n$$

$$m(1 \text{ bombona}) = 96 \text{ g} : 12$$

$$m(1 \text{ bombona}) = 8 \text{ g}$$

$$(16.) \quad m_{\text{posude}} = 200 \text{ g} \\ m_{\text{brašna}} = 25 \text{ dag} = 250 \text{ g} \\ m_{\text{šećera}} = 20 \text{ dag} = 200 \text{ g} \\ m_{\text{pžp}} = 5 \text{ g} \\ m_{\text{oraha}} = 10 \text{ dag} = 100 \text{ g}$$

$$m = m_{\text{posude}} + m_{\text{brašna}} + m_{\text{šećera}} + m_{\text{pžp}} + m_{\text{oraha}}$$

$$m = 200 \text{ g} + 250 \text{ g} + 200 \text{ g} + 5 \text{ g} + 100 \text{ g}$$

$$m = 755 \text{ g}$$

$$(17.) \quad m(\text{torte}) = 1500 \text{ g} \\ n = 3 \\ m(1 \text{ kriška}) = 12,5 \text{ dag} = 125 \text{ g}$$

$$m(\text{ostatka torte}) = m(\text{torte}) - n \cdot m(1 \text{ kriška})$$

$$m(\text{ostatka torte}) = 1500 \text{ g} - 3 \cdot 125 \text{ g}$$

$$m(\text{ostatka torte}) = 1500 \text{ g} - 375 \text{ g}$$

$$m(\text{ostatka torte}) = 1125 \text{ g}$$

$$(18.) \quad m = 156 \text{ g} \\ V = 0,02 \text{ dm}^3 = 20 \text{ cm}^3$$

$$\rho = \frac{m}{V}$$

$$\rho = \frac{156 \text{ g}}{20 \text{ cm}^3}$$

$$\rho = 7,8 \frac{\text{g}}{\text{cm}^3}$$

$$(19.) \quad V = 25 \text{ l} = 25 \text{ dm}^3 = 0,025 \text{ m}^3 \\ m = 20 \text{ kg}$$

$$\rho = \frac{m}{V}$$

$$\rho = \frac{20 \text{ kg}}{0,025 \text{ m}^3}$$

$$\rho = 800 \frac{\text{kg}}{\text{m}^3}$$

$$(20.) \quad m = 1,5 \text{ kg} \\ \rho = 1,293 \frac{\text{kg}}{\text{m}^3}$$

$$V = \frac{m}{\rho}$$

$$V = \frac{1,5 \text{ kg}}{1,293 \frac{\text{kg}}{\text{m}^3}}$$

$$V = 1,16 \text{ m}^3$$

21. $V = 5 \text{ cm}^3$
 $\rho = 10,5 \text{ g/cm}^3$

$$m = \rho \cdot V$$

$$m = 10,5 \frac{\text{g}}{\text{cm}^3} \cdot 5 \text{ cm}^3$$

$$m = 52,5 \text{ g}$$

22. $m = 30 \text{ kg}$
 $a = 1 \text{ m}$
 $b = 5 \text{ dm} = 0,5 \text{ m}$
 $c = 3 \text{ dm} = 0,3 \text{ m}$

$$V = abc$$

$$V = 1 \text{ m} \cdot 0,5 \text{ m} \cdot 0,3 \text{ m}$$

$$V = 0,15 \text{ m}^3$$

$$\rho = \frac{m}{V}$$

$$\rho = \frac{30 \text{ kg}}{0,15 \text{ m}^3}$$

$$\rho = 200 \frac{\text{kg}}{\text{m}^3}$$

23. $a = 30 \text{ cm}$
 $b = 20 \text{ cm}$
 $c = 25 \text{ cm}$
 $\rho_{\text{vode}} = 1 \frac{\text{g}}{\text{cm}^3}$

$$V = abc$$

$$V = 30 \text{ cm} \cdot 20 \text{ cm} \cdot 25 \text{ cm}$$

$$V = 15000 \text{ cm}^3$$

$$m = \rho \cdot V$$

$$m = 1 \frac{\text{g}}{\text{cm}^3} \cdot 15000 \text{ cm}^3$$

$$m = 15000 \text{ g}$$

$$m = 15 \text{ kg}$$

24. a) $V = 600 \text{ ml}$
b) $V = 1700 \text{ ml}$

25. $V_1 = 50 \text{ cm}^3$
 $V_2 = 70 \text{ cm}^3$

$$V = V_2 - V_1$$

$$V = 70 \text{ cm}^3 - 50 \text{ cm}^3$$

$$V = 20 \text{ cm}^3$$

26. $n = 5$
 $m = 800 \text{ g}$

$$m_1 = m : n$$

$$m_1 = 800 \text{ g} : 5$$

$$m_1 = 160 \text{ g}$$

27. 1. TOČAN ODGOVOR: c (Oba dijela krede su od iste tvari načinjena.)

2. TOČAN ODGOVOR: c (Obje kocke su načinjene od željeza.)

3. TOČAN ODGOVOR: treći odgovor $\rho_A > \rho_C > \rho_B$

(Od tri tijela jednake mase najveću gustoću ima tijelo najmanjeg volumena.)

4. TOČAN ODGOVOR: c (Od dva tijela jednakih masa, veću gustoću ima tijelo manjeg volumena.)