



## Englische Übungen zu Quader und Würfel

1. Draw the net and calculate the surface area.

- a. Cube:  $a = 4.2$  cm
- b. Cuboid:  $a = 3.7$  cm,  $b = 2.9$  cm,  $c = 4.5$  cm

2. Calculate

- a. the volume and
- b. the surface area.
  - 1) Cuboid:  $a = 2.5$  m,  $b = 1.3$  m,  $c = 3.5$  m
  - 2) Cuboid with a square base:  $a = b = 76$  cm,  $c = 1.35$  m
  - 3) Cube with a length of 66 cm





3. An aquarium has a length of 1.2 m, a width of 60 cm, and a height of 40 cm.
  - a. How many litres of water are inside this aquarium if it is filled with water?
  - b. What is the height of the water if there are 180 litres of water in this aquarium?
  
4. A rectangular swimming pool has a length of 10 m, a width of 4 m, and a depth of 2.5 m.
  - a. How many hectolitres of water are necessary to fill the swimming pool?
  - b. How many tons of water are in the pool if 1 m<sup>3</sup> water has a mass of 1 ton?

## Vocabulary

Englisch	Deutsch
net	Netz
to calculate	berechnen
surface area	Oberfläche
cube	Würfel
cuboid	Quader
volume	Rauminhalt
square base	quadratische Grundfläche
length	Länge
width	Breite
height	Höhe
to be filled	gefüllt sein
rectangular	rechteckig
depth	Tiefe
necessary	notwendig
ton	Tonne
mass	Masse



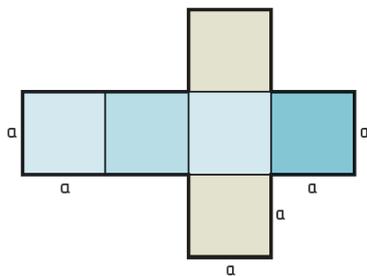


## Solutions

1. Draw the net and calculate the surface area.

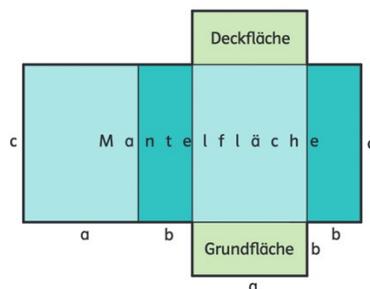
a. Cube:  $a = 4.2$  cm

$$O = 106 \text{ cm}^2 \text{ (105.84)}$$



b. Cuboid:  $a = 3.7$  cm,  $b = 2.9$  cm,  $c = 4.5$  cm

$$O = 81 \text{ cm}^2 \text{ (80.86)}$$



2. 1)  $V = 11.4 \text{ m}^3$  (11.375) b)  $O = 33.1 \text{ m}^2$

2) a)  $V = 0.78 \text{ m}^3$  (0.77976) b)  $O = 5.26 \text{ m}^2$  (5.2592)

3) a)  $V = 0.29 \text{ m}^3$  (0.287496) b)  $O = 2.6 \text{ m}^2$  (2.6136)

3. An aquarium has a length of 1.2 m, a width of 60 cm, and a height of 40 cm.

a. There are 288 litres of water inside this aquarium.

b. The height of the water is 25 cm.

4.

a. 1 000 hl of water are necessary to fill the pool.

b. There are 100 tons of water in the pool.

