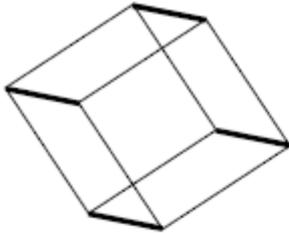


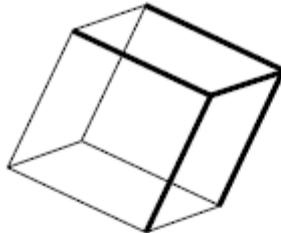
Aufgabe 4 E: Lösungen

1.

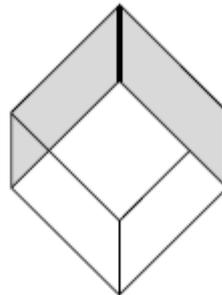
a)



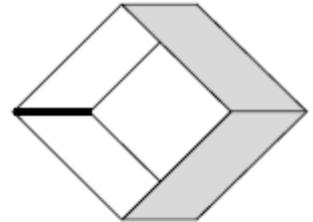
b)



c)

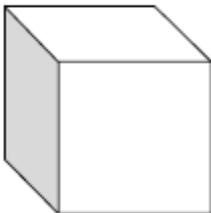


d)

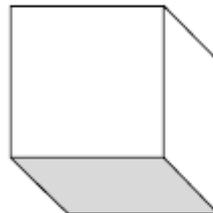


2.

a) von links oben

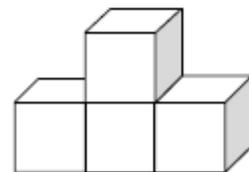
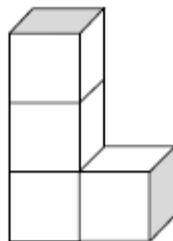
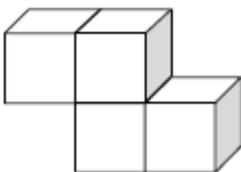
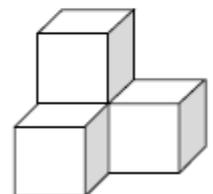
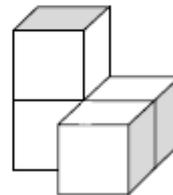
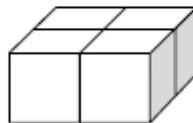
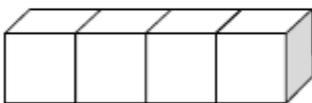


b) von rechts unten



3.

Es gibt total 8 verschiedene Formen. (Eine Form ist als Aufgabe vorgegeben.)

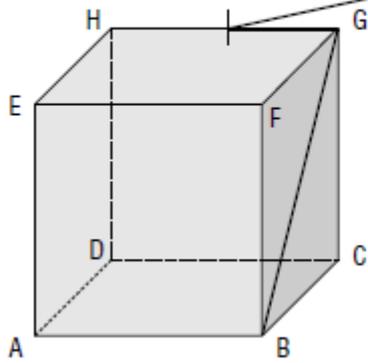


4.

1. Bewegung: **Kippen oder drehen nach rechts um 90°.**

2. Bewegung: **Kippen oder drehen nach hinten um 90°.**

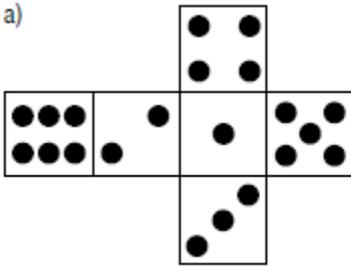
5.



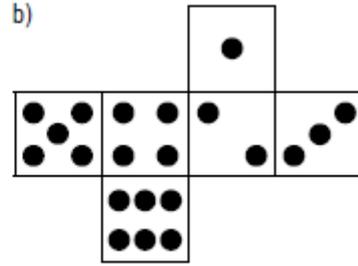
Mittelpunkt der Kante GH

6.

a)



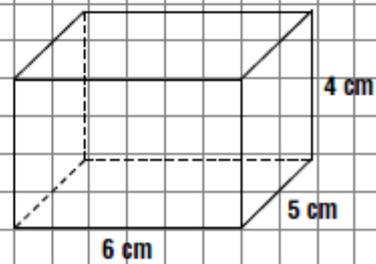
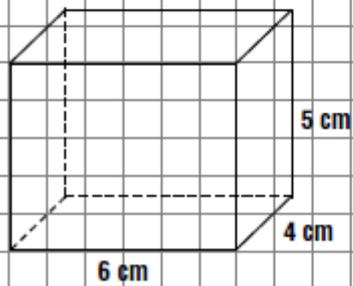
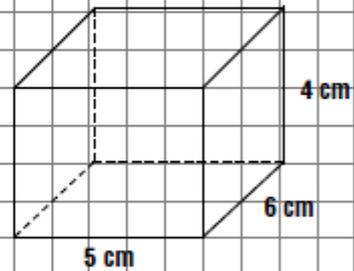
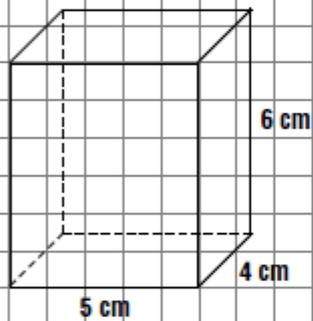
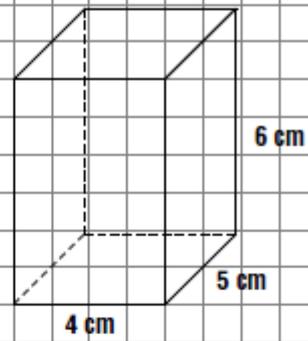
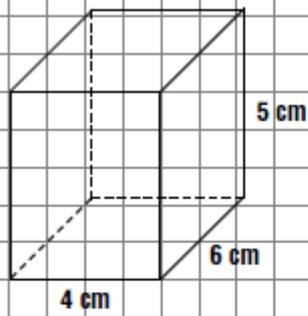
b)



Die Stellung der Augenzahl sechs ist nicht zu beachten. Die Augenzahlen zwei und drei sind in der Aufgabe vorgegeben.

7.

Maßstab 1 : 2



8.

| | Seite a | Seite b | Seite c | Oberfläche O | Volumen V |
|----------|---------|---------|---------|---------------------|--------------------|
| Quader A | 5 cm | 10 cm | 20 cm | | |
| Quader B | | 1.5 m | 80 cm | | 4.2 m ³ |
| Quader C | | 6 cm | 9.5 cm | 238 cm ² | |

Quader A $O = 2(5 \cdot 10) + 2(5 \cdot 20) + 2(10 \cdot 20) \text{ (cm}^2\text{)} = 700 \text{ cm}^2$
 $V = 5 \cdot 10 \cdot 20 \text{ (cm}^3\text{)} = 1000 \text{ cm}^3$

Quader B $a = \frac{4.2 \text{ m}^3}{0.8 \text{ m} \cdot 1.5 \text{ m}} = 3.5 \text{ m}$
 $O = 2(3.5 \cdot 1.5) + 2(3.5 \cdot 0.8) + 2(1.5 \cdot 0.8) \text{ (m}^2\text{)} = 18.5 \text{ m}^2$

Quader C $238 = 2(9.5 \cdot 6) + 2(a \cdot 9.5) + 2(a \cdot 6)$
 $124 = 31a$
 $a = 124 : 31 \text{ (cm)} = 4 \text{ cm}$
 $V = 4 \cdot 6 \cdot 9.5 \text{ (cm}^3\text{)} = 228 \text{ cm}^3$