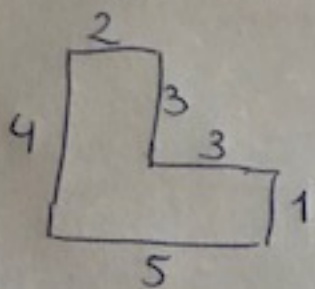


## antwoorden

## oefening lengte, oppervlakte, inhoud KB en GL

opgawe 1



totaal 18 dm

$$2 \times 18 = 36 \text{ dm}$$

$$6 \times 3 = 18$$

$$36 + 18 = \underline{\underline{54 \text{ dm}}}$$

opgawe 2

$$\text{balk 1} \rightarrow 4 \times 2 \times 3 = 24 \text{ dm}^3$$

$$\text{balk 2} \rightarrow 3 \times 3 \times 1 = 9 \text{ dm}^3$$

$$24 + 9 = 33 \text{ dm}^3 = \underline{\underline{33 \text{ liter}}}$$

### Opgave 3

tellen : 52 elementen

### Opgave 4

tekening :  $5 \times 5 = 25$  cirkels  
per cirkel 4 elementen nodig  
 $4 \times 25 = \underline{100}$  elementen

### Opgave 5

$$\text{opp. } \square = 90 \times 90 = 8100 \text{ cm}^2$$

$$\text{opp } \bigcirc = \pi \times \text{straal}^2 = \pi \times 70^2 = 15393,8 \text{ cm}^2$$

$$\frac{1}{4} \text{ deel v.d cirkel} = 15393,8 : 4 = 3848,5 \text{ cm}^2$$

$$8100 - 3848,5 = 4251,5 \approx \underline{\underline{4252}} \text{ cm}^2$$

## opgave 6

$$\text{opp. bovenkant en opp. onderkant} = 2 \times 4252$$

$$\text{lange zijanten: } 65 \times 90 = \underline{5850 \text{ cm}^2} = \underline{8504 \text{ cm}^2}$$

$$2 \times 5850 = \underline{11700 \text{ cm}^2}$$

$$\text{korte zijanten } 20 \times 65 = 1300 \text{ cm}^2$$

$$2 \times 1300 \text{ cm}^2 = \underline{2600 \text{ cm}^2}$$

boog :

$$\text{omtrek } o = \pi \times d = \pi \times 140 = 440 \text{ cm}$$

$$\frac{1}{4} \times 440 = 110 \text{ cm}$$

$$110 \times 65 = 7150 \text{ cm}^2$$

(bij niet afronden kom je uit op  $7147 \text{ cm}^2$ )

$$8504 + 11700 + 2600 + 7150 = \underline{\underline{29954 \text{ cm}^2}}$$

(als je tussendoor niet hebt  
afgerond kom je uit op  
 $29951 \text{ cm}^2$ )



### opgawe 7

$$\begin{aligned}\text{inhoud piramide} &= \frac{1}{3} \times \text{opp. grondvl} \times \text{hoogte} \\ &= \frac{1}{3} \times (18 \times 18) \times 24 \\ &= \underline{\underline{2592 \text{ cm}^3}}\end{aligned}$$

### opgawe 8

$$\begin{aligned}\text{opp cirkel} &= \pi \times \text{straal}^2 \\ &= \pi \times 2,20^2 = \underline{\underline{15,2 \text{ m}^2}}\end{aligned}$$

### opgawe 9

$$90 \text{ cm} = 9 \text{ dm}$$

$$\boxed{1 \text{ dm}^3 = 1 \text{ liter}} \quad !$$

$$15,2 \text{ m}^2 = 15,2 \times 100 = 1520 \text{ dm}^2$$

$$\begin{aligned}\text{inhoud} &= 9 \times 1520 = 13680 \text{ dm}^3 \\ &= 13680 \text{ liter}\end{aligned}$$

$$13680 : 80 = \underline{\underline{171}} \text{ kruiwagens}$$

### opgave 10

$$\begin{aligned}\text{omtrek cirkel} &= \pi \times \text{diameter} \\ &= \pi \times 4,40 = 13,8 \text{ m}\end{aligned}$$

$$13,8 \text{ m} = 1380 \text{ cm}$$

$$1380 : 25 = 55,2 \dots$$

derfor 56 planter nødvendig

### opgave 11

$$56 \times 6,80 \times 1,19 = \underline{\underline{\text{€ } 453,15}}$$

### opgave 12

$$\text{↻} = 360^\circ$$

$$360 : 12 = \underline{\underline{30^\circ}}$$

### Opgave 13

$$\text{inhoud} = \text{opp grondvlak} \times \text{hoogte}$$

$$= \pi \times 15^2 \times 5,6$$

$$= 3958,4 \text{ cm}^3$$

$$= 3,9584 \text{ dm}^3 = 3,9584 \text{ liter}$$

Janet moet 4 emmertjes popcorn kopen

### Opgave 14

$$\text{omtrek} = \pi \times d = \pi \times 30 = 94,2 \text{ cm}$$

$$94,2 \times 5,6 = 527,52 \text{ cm}^2$$

$$\rightarrow \underline{\underline{528 \text{ cm}^2}}$$