

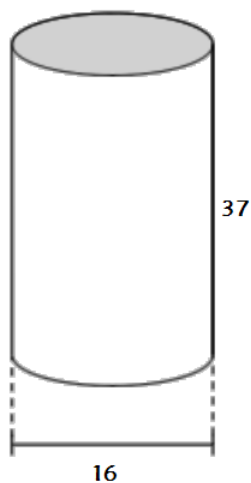


Drukbare assessering CAMI Wiskunde: Graad 9

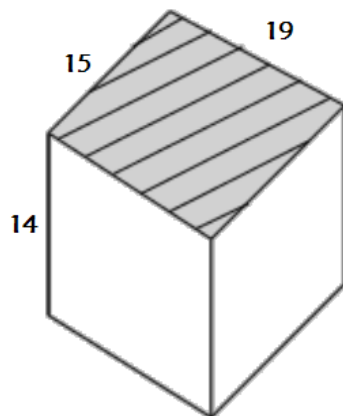
Buite-oppervlakte en Volume

1. Bereken die buite-oppervlakte van die gegewe voorwerpe.

1.1



1.2



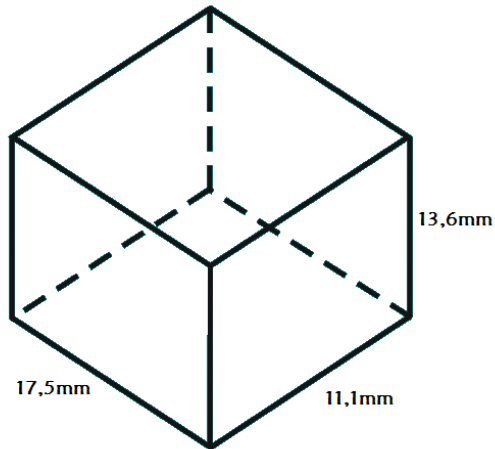
2. Bereken die waarde van x as die buite-oppervlakte van die kubus $97\,336\text{mm}^2$ is.





Drukbare assessering CAMI Wiskunde: Graad 9

3. Wat is die volume van die kubus in cm^3 ?



4. Bereken die hoogte van die silinder as die volume $904,32\text{mm}^3$ is.



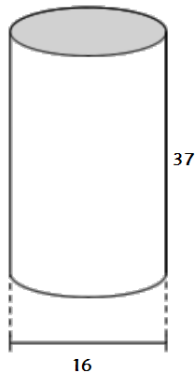


Drukbare assessering CAMI Wiskunde: Graad 9

MEMO

1. Bereken die buite-oppervlakte van die gegewe voorwerpe.
[9.4.1; 9.5.2.1; 9.5.3.1]

1.1



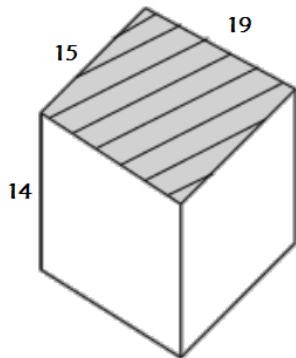
$$TBO = 2\pi r^2 + 2\pi rh$$

$$TBO = 2\pi(8)^2 + 2\pi(8)(37)$$

$$TBO = 2261,95$$



1.2



$$TBO = 2(14)(15) + 2(15)(19) + 2(14)(19)$$

$$TBO = 1522$$

2. Bereken die waarde van x as die buite-oppervlakte van die kubus $97\,336\text{mm}^2$ is.
[9.5.2.2; 9.5.6.1]



Drukbare assessering CAMI Wiskunde: Graad 9



x

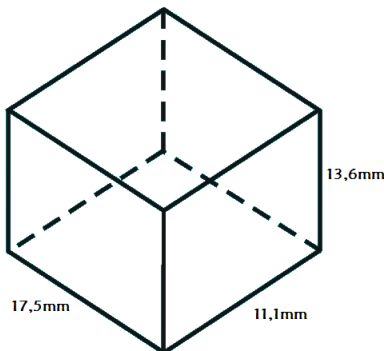
$$TBO = 6x^2$$

$$97336 = 6x^2$$

$$\therefore x = 127,37mm$$

3. Wat is die volume van die kubus in cm^3 ?

[9.5.2.2; 9.5.2.3]



$$1mm = 0,1cm$$

$$Volume = L \times B \times H$$

$$Volume = 1,75cm \times 1,1cm \times 1,36cm$$

$$Volume = 2,6418cm^3$$

4. Bereken die hoogte van die silinder as die volume $904,32mm^3$ is.

[9.5.6.1]



$$Volume = \pi r^2 h$$

$$904,32 = \pi \times (4)^2 \times h$$

$$\therefore h = \frac{904,32}{50,2655} = 18mm$$