

Maths

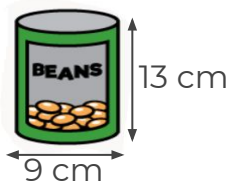
# Surface area problems

Miss Parnham

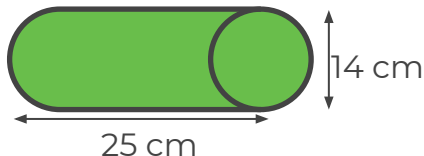


# Surface area problems

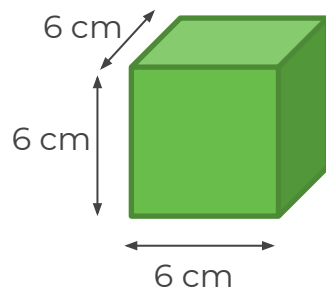
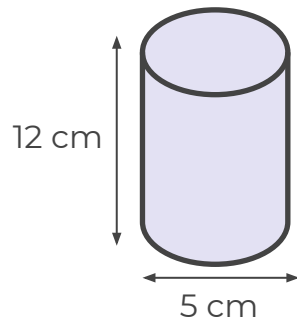
1. Calculate the area of the label on this can of beans to 3 significant figures.



2. The cylinder below is wrapped in wrapping paper. Assuming no overlap of paper, what is the area of the wrapping paper to 3 significant figures?

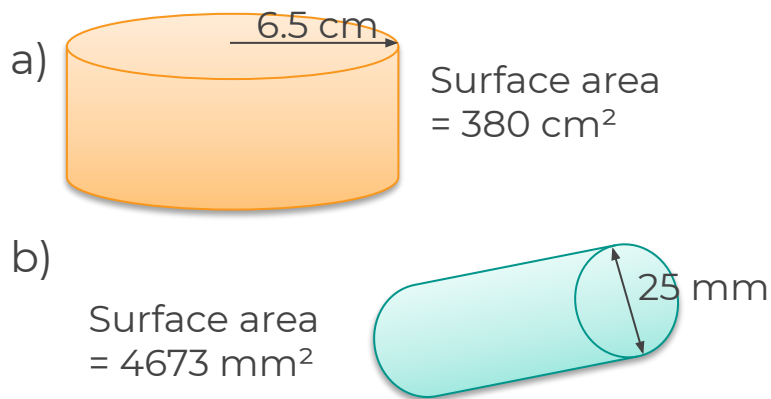


3. Which of these shapes, cube or cylinder, has the largest surface area? Show working to justify your answer.

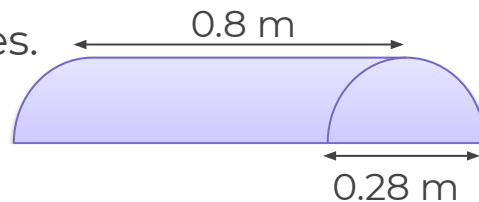


# Surface Area Problems

4. Find the height of each of these cylinders to 3 significant figures.



5. Find the surface area of this semi-circular prism to 3 significant figures.



Area of curved rectangle = \_\_\_\_\_  $\text{m}^2$

Area of 2 semicircles = \_\_\_\_\_  $\text{m}^2$

Area of flat rectangle = \_\_\_\_\_  $\text{m}^2$

Total area = \_\_\_\_\_  $\text{m}^2$  (3sf)

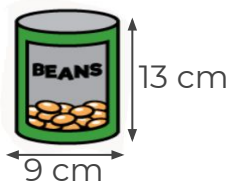


# Answers



# Surface area problems

1. Calculate the area of the label on this can of beans to 3 significant figures.



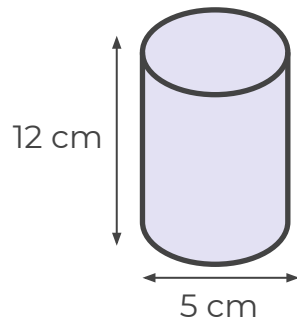
368 cm<sup>2</sup>

2. The cylinder below is wrapped in wrapping paper. Assuming no overlap of paper, what is the area of the wrapping paper to 3 significant figures?

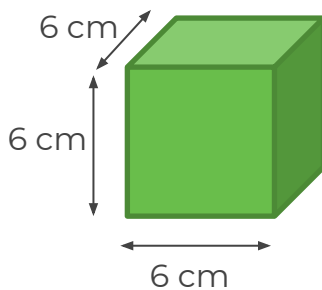


1410 cm<sup>2</sup>

3. Which of these shapes, cube or cylinder, has the largest surface area? Show working to justify your answer.



228 cm<sup>2</sup>



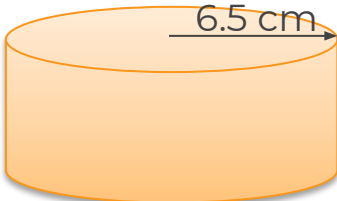
216 cm<sup>2</sup>

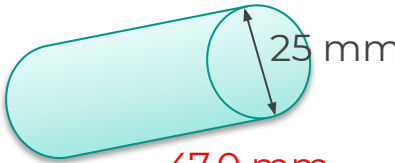
The cylinder has the largest surface area.



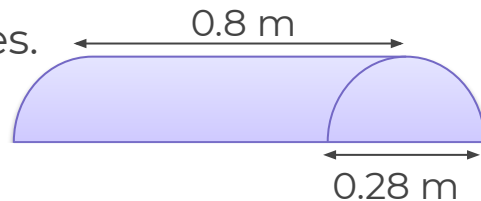
# Surface Area Problems

4. Find the height of each of these cylinders to 3 significant figures.

a)  Surface area =  $380 \text{ cm}^2$   
 $2.80 \text{ cm}$

b)  Surface area =  $4673 \text{ mm}^2$

5. Find the surface area of this semi-circular prism to 3 significant figures.



Area of curved rectangle =  $\underline{0.352} \text{ m}^2$   
Area of 2 semicircles =  $\underline{0.0616} \text{ m}^2$   
Area of flat rectangle =  $\underline{0.224} \text{ m}^2$   
Total area =  $\underline{0.637} \text{ m}^2$  (3sf)

