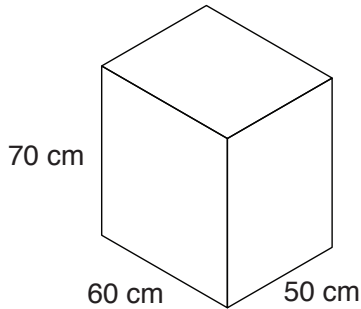


What is problem solving?

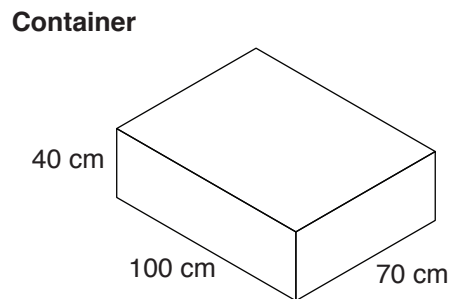
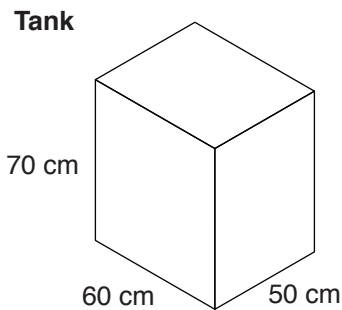


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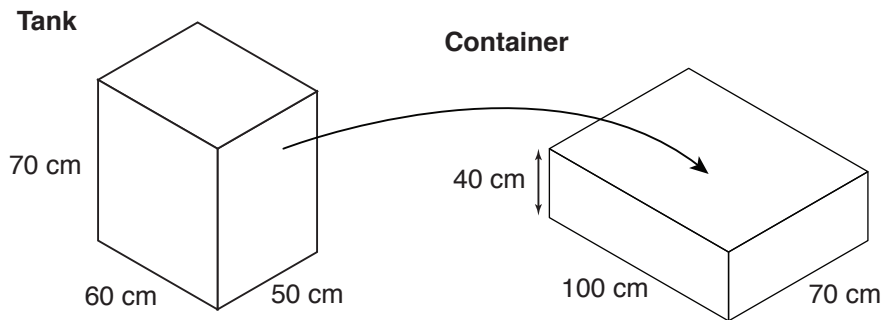
- 1 The diagram shows a **cuboid**.
What questions might go with the diagram.
Do not answer your questions at this stage.



- 2 The diagram shows a **tank** and a **container**.
The tank is full of oil.
The container is empty.
Draw a sketch to show the information.



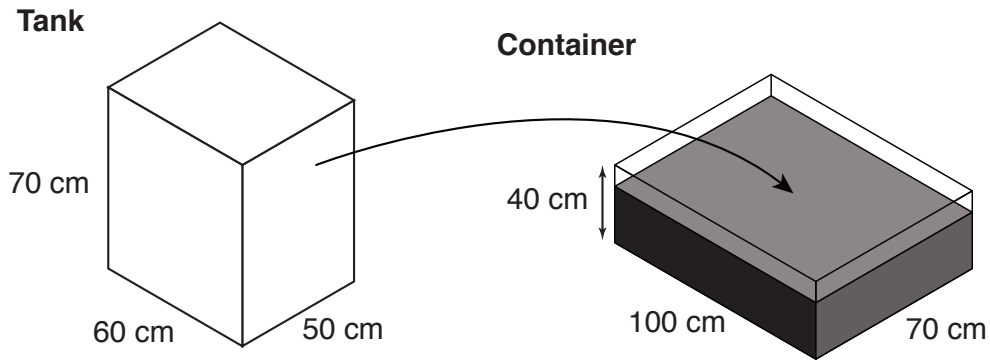
- 3 The oil from the tank is put into the container.
Draw a sketch to show the information.



What is problem solving?



*



- 4 What information is needed to work out the height of the oil in the container?
Write a question about the tank.
Write a question about the container.
Answer your questions.

Question about the tank: _____

Answer: _____

Question about the container: _____

Answer: _____

- 5 Work out the height of the oil in the container.

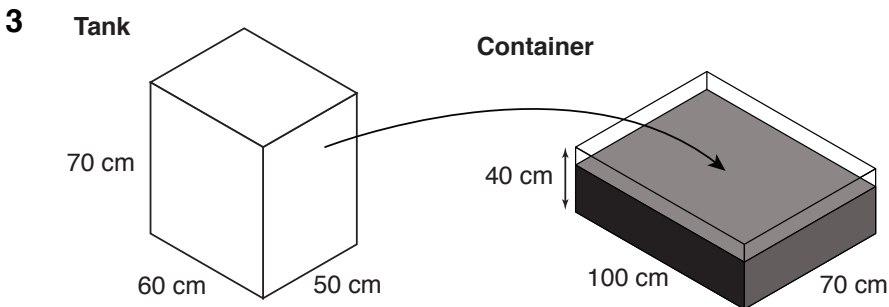
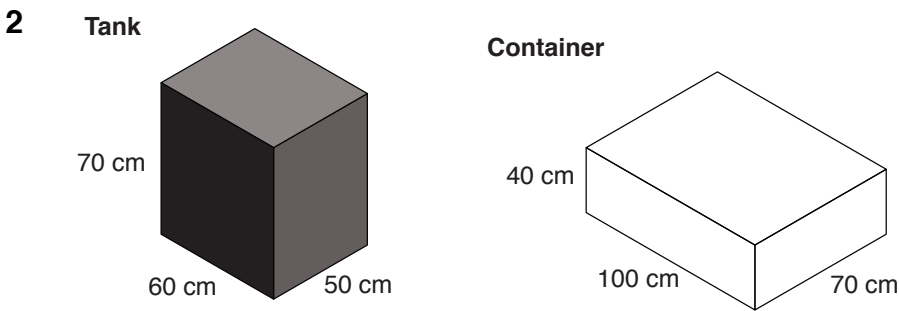
Answer _____

What is problem solving? Answers



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- 1 Possible answers include:
What is the volume?
What is the area of the base?
What is the surface area?
Draw an accurate net.
Make an isometric drawing.



- 4 What is the volume of oil in the tank?
 $70 \times 60 \times 50 = 210\,000 \text{ cm}^3$
What is the area of the base of the container?
 $100 \times 70 = 7\,000 \text{ cm}^2$
- 5 Height of oil = $210\,000 \div 7\,000 = 30 \text{ cm}$