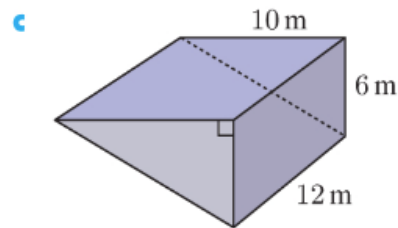
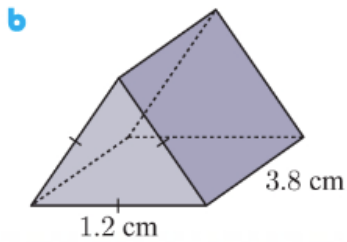
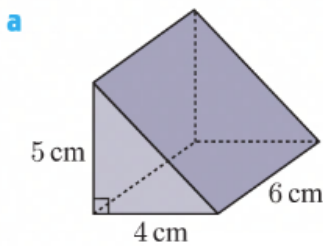
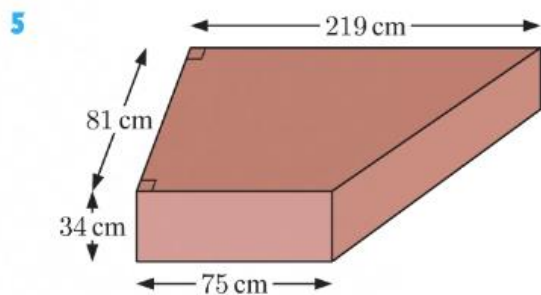
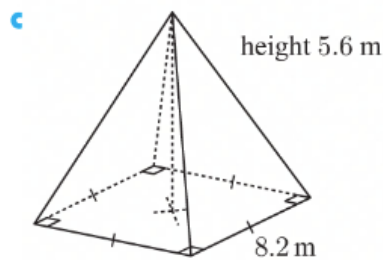
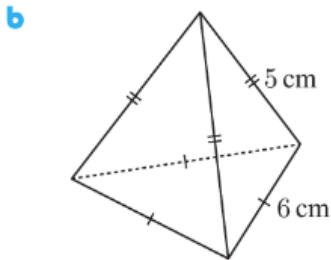
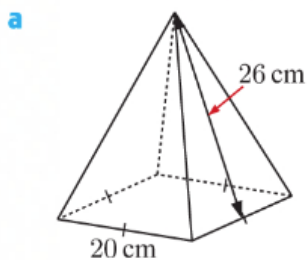


2 Find the surface area of each triangular prism:



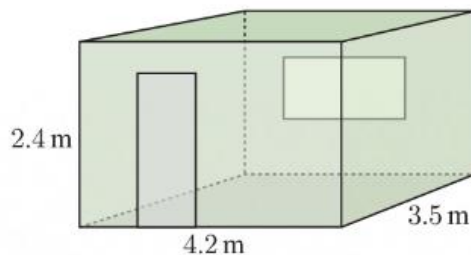
4 Find the surface area of each pyramid:



A harpichord case has the dimensions shown.

- a Find the total area of the top and bottom surfaces.
- b Find the area of each side of the case.
- c If the timber costs €128 per square metre, find the value of the timber used to construct this case.

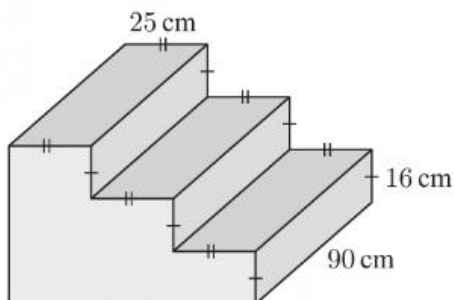
6 The walls and ceiling of this room need to be painted with two coats of paint. The door is 0.8 m by 2.2 m and the window is 183 cm by 91 cm. The door also has to be stained on *both* sides with two coats of stain. Use the following table to calculate the total cost of the stain and paint:



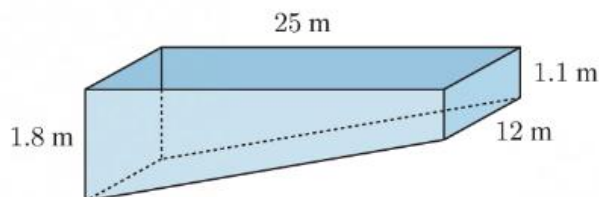
Type of paint	Size	Area covered	Cost per tin
wall paint	4 litres	16 m <sup>2</sup>	\$32.45
	2 litres	8 m <sup>2</sup>	\$20.80
wood stain (for doors)	2 litres	10 m <sup>2</sup>	\$23.60
	1 litre	5 m <sup>2</sup>	\$15.40

7 Find the surface area of:

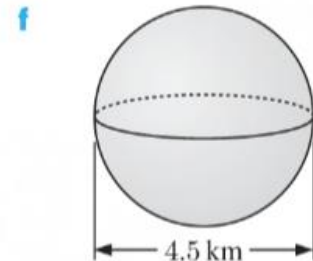
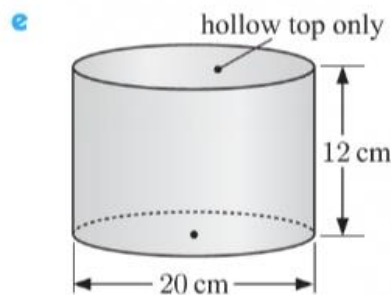
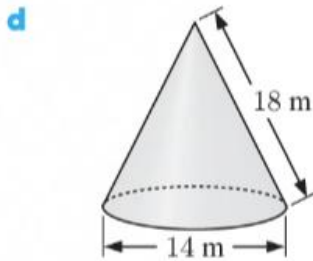
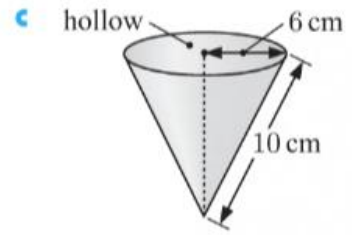
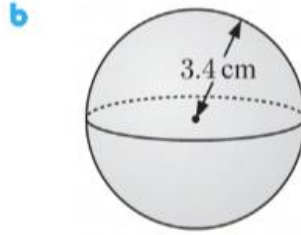
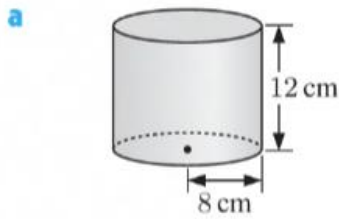
a this set of steps



b the sides and base of this swimming pool.

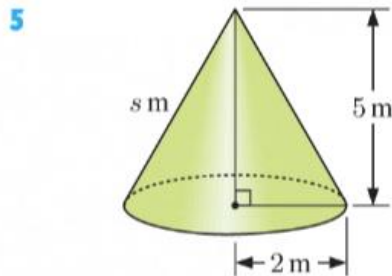
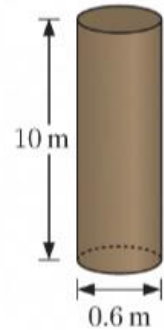


1 Find, to 1 decimal place, the outer surface area of:



4 A new wharf has 24 cylindrical concrete pylons, each with diameter 0.6 m and length 10 m. The pylons will be coated with a salt resistant material.

- Find the total surface area of one pylon.
- Coating the pylons with the material costs \$45.50 per  $\text{m}^2$ . Find the cost of coating one pylon.
- Find the total cost of coating the 24 pylons, to the nearest dollar.

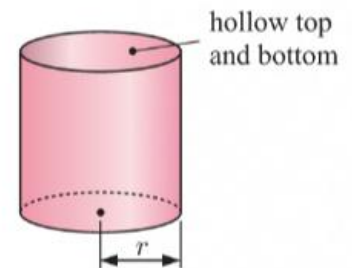


A conical tent has base radius 2 m and height 5 m.

- Find the slant height  $s$ , to 2 decimal places.
- Find the area of canvas necessary to make the tent, including the base.
- If canvas costs \$18 per  $\text{m}^2$ , find the cost of the canvas.

7 The height of a hollow cylinder is the same as its diameter.

- Write an expression for the outer surface area of the cylinder in terms of its radius  $r$ .
- Find the height of the cylinder if its surface area is  $91.6 \text{ m}^2$ .



8 The slant height of a hollow cone is three times its radius.

- Write an expression for the outer surface area of the cone in terms of its radius  $r$ .
- Given that the surface area is  $21.2 \text{ cm}^2$ , find the cone's:
  - slant height
  - height.

