Volume and Surface Area of Cones

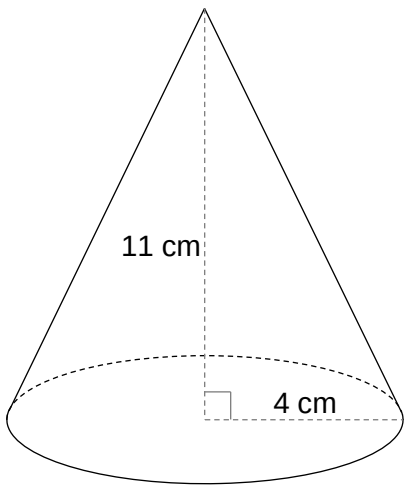
SCAN ME

REVISE THIS TOPIC

CHECK YOUR ANSWERS

SCAN ME

1 Here is a cone.



Volume of cone = $\frac{1}{3}\pi r^2 h$ where r is the radius and h is the perpendicular height

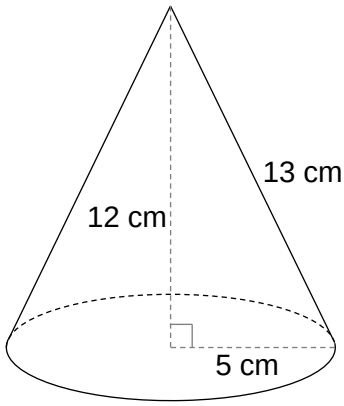
Work out the volume of the cone.
Give your answer to 1 decimal place.

[2 marks]

Answer _____ cm^3

2

2 Here is a cone.



Volume of cone = $\frac{1}{3}\pi r^2 h$ where r is the radius and h is the perpendicular height

2 (a) Work out the volume of the cone.
Give your answer to 1 decimal place.

[2 marks]

Answer _____ cm^3

Curved surface area of a cone = $\pi r l$ where r is the radius and l is the slant height

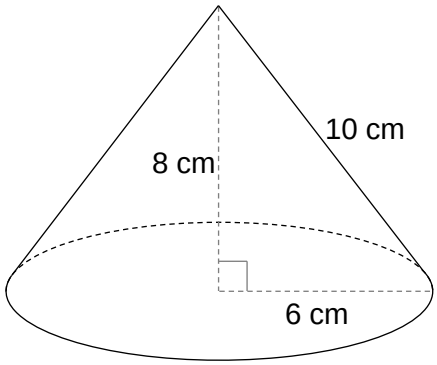
2 (b) Work out the total surface area of the cone.
Give your answer to 1 decimal place.

[3 marks]

Answer _____ cm^2

Solutions

3 Here is a cone.



Volume of cone = $\frac{1}{3}\pi r^2 h$ where r is the radius and h is the perpendicular height

3 (a) Work out the volume of the cone.
Give your answer to 1 decimal place.

[2 marks]

Answer _____ cm^3

Curved surface area of a cone = $\pi r l$ where r is the radius and l is the slant height

3 (b) Work out the total surface area of the cone.
Give your answer to 1 decimal place.

[3 marks]

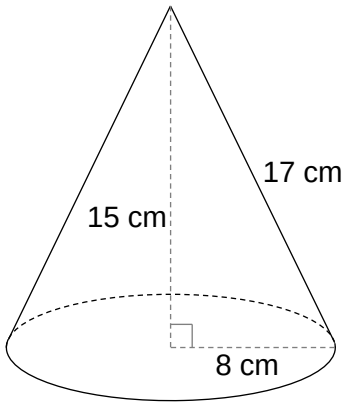
Answer _____ cm^2

10

Turn over ►

Solutions

4 Here is a cone.



Volume of cone = $\frac{1}{3}\pi r^2 h$ where r is the radius and h is the perpendicular height

4 (a) Work out the volume of the cone.
Give your answer to 1 decimal place.

[2 marks]

Answer _____ cm^3

Curved surface area of a cone = $\pi r l$ where r is the radius and l is the slant height

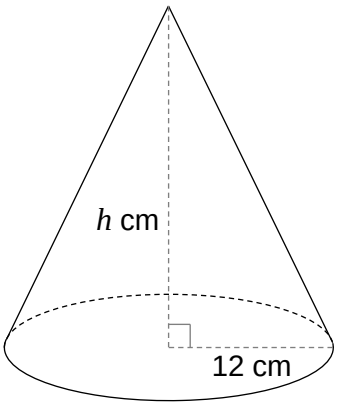
4 (b) Work out the total surface area of the cone.
Give your answer to 1 decimal place.

[3 marks]

Answer _____ cm^2

Solutions

5 Here is a cone.



Volume of cone = $\frac{1}{3}\pi r^2 h$ where r is the radius and h is the perpendicular height

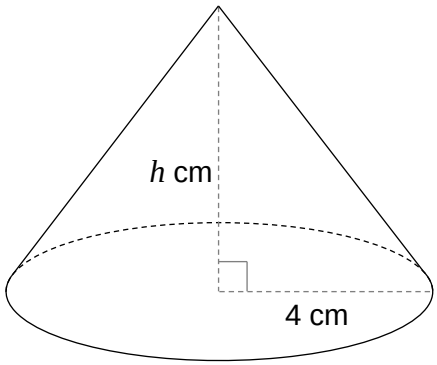
The volume of the cone is 3000 cm^3

Work out the value of h, the height of the cone.
Give your answer to 1 decimal place. **[3 marks]**

h = _____ cm

8

6 Here is a cone.



Volume of cone = $\frac{1}{3}\pi r^2 h$ where r is the radius and h is the perpendicular height

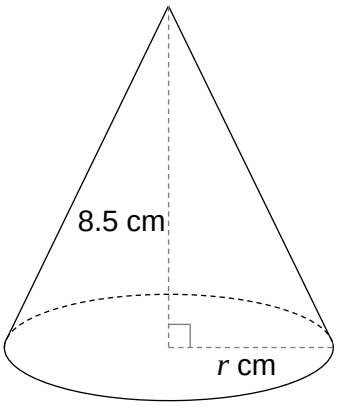
The volume of the cone is 90 cm^3

Work out the value of h, the height of the cone.
Give your answer to 1 decimal place. **[3 marks]**

h = _____ cm

Solutions

7 Here is a cone.



Volume of cone = $\frac{1}{3}\pi r^2 h$ where r is the radius and h is the perpendicular height

The volume of the cone is 120 cm^3

Work out the value of r, the radius of the base of the cone.
Give your answer to 1 decimal place. **[4 marks]**

r = _____

7

Solutions