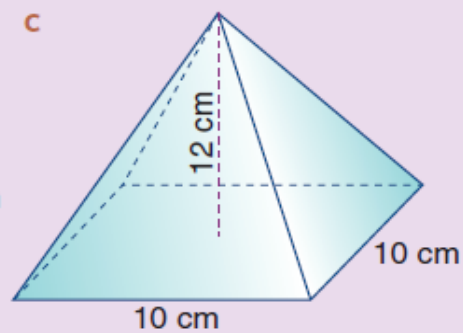
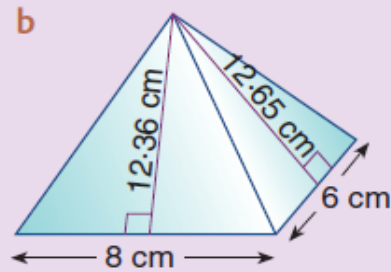
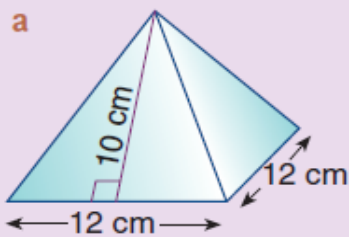
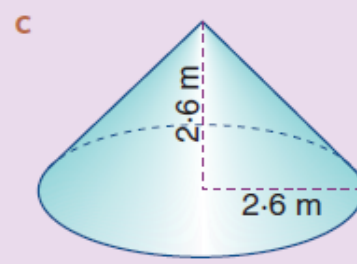
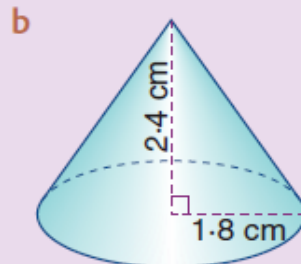
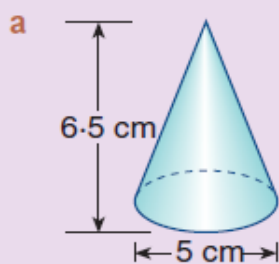


Volume and surface area

1 Calculate the surface area of the following pyramids.



2 Calculate the surface area of the following cones. Give answers correct to one decimal place.



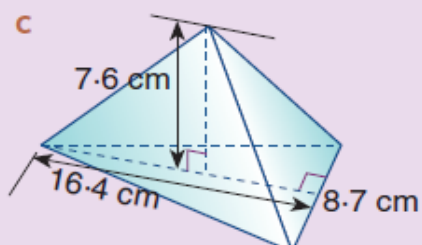
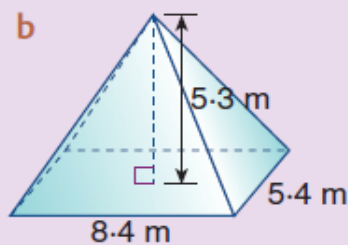
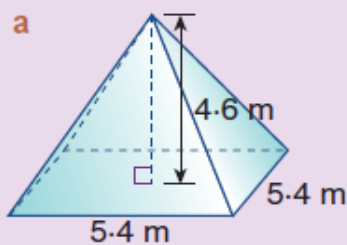
3 Calculate the surface area of:

a a sphere of radius 5 cm, correct to 2 dec. pl.

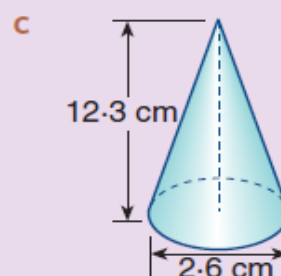
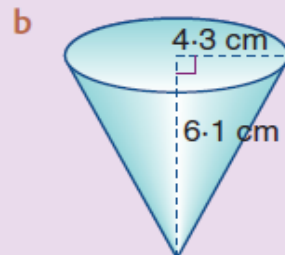
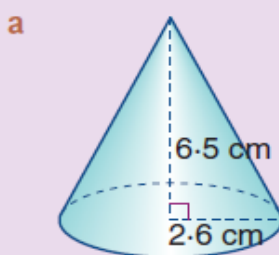
b a sphere of diameter 16.6 cm, correct to 2 dec. pl.

c a hemisphere of radius 3 cm, correct to 2 dec. pl.

4 Calculate the volume of the following solids.



5 Calculate the volume of the following solids correct to one decimal place.



6 Calculate the volume of the following solids correct to one decimal place:

a a sphere of radius 5 cm

b a sphere of diameter 8.6 cm

c a hemisphere of diameter 15 cm

Answers:

Diagnostic Test 10 Surface area and volume

- | | | | | | |
|----------------------------------|--------------------------------|-------------------------------|---------------------------------|-------------------------------|---------------------------------|
| 1 a 384 cm^2 | b 222.78 cm^2 | c 360 cm^2 | 2 a 94.3 cm^2 | b 27.1 cm^2 | c 51.3 m^2 |
| 3 a 314.16 cm^2 | b 865.70 cm^2 | c 84.82 cm^2 | 4 a 44.712 m^3 | b 80.136 m^3 | c 180.728 cm^3 |
| 5 a 46.0 cm^3 | b 118.1 cm^3 | c 21.8 cm^3 | 6 a 523.6 cm^3 | b 333.0 cm^3 | c 883.6 cm^3 |