

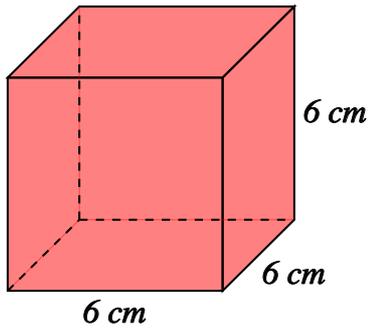
# Surface Area and Volume of 3D shapes - advanced

Name:	Class:	Date:
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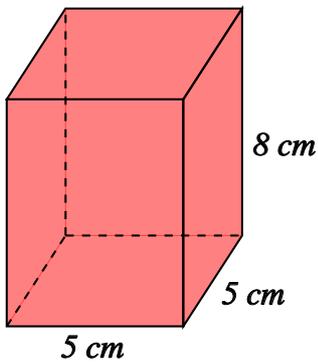
1) Find the volume and surface area of the cube

[1]

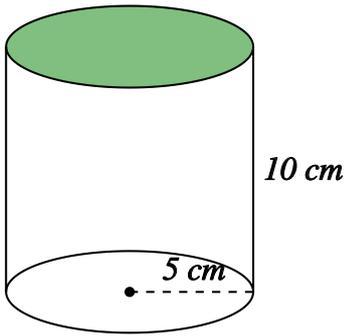


2) Find the volume and surface area of the cuboid

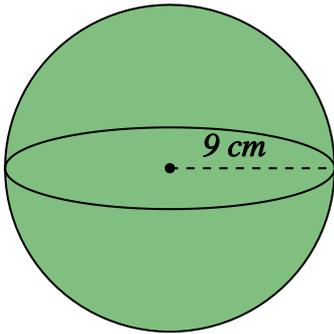
[1]



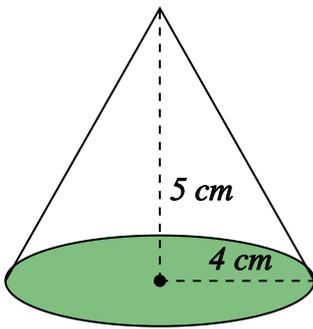
- 3) Find the volume and surface area of the cylinder, rounding your answers to 3 significant figures [1]



- 4) Find the volume and surface area of the sphere, rounding your answers to 3 significant figures [1]



5) Find the volume and surface area of the solid cone, rounding your answers to 3 significant figures [1]



6) Find the volume of a cube, given that its surface area is  $384 \text{ cm}^2$  [1]

7) Find the surface area of a cube, given that its volume is  $512 \text{ cm}^3$  [1]

8) Find the volume of a sphere, given that its surface area is  $600 \text{ cm}^2$ , rounding your answer to 3 significant figures

9) Find the surface area of a sphere, given that its volume is  $540 \text{ cm}^3$ , rounding your answer to 3 significant figures

[1]

[1]

### **Solutions for the assessment Surface Area and Volume of 3D shapes - advanced**

1) Volume =  $216 \text{ cm}^3$ , Surface area =  $216 \text{ cm}^2$

2) Volume =  $200 \text{ cm}^3$ , Surface area =  $210 \text{ cm}^2$

3) Volume =  $785 \text{ cm}^3$ , Surface area =  $471 \text{ cm}^2$

4) Volume =  $3050 \text{ cm}^3$ , Surface area =  $1020 \text{ cm}^2$

5) Volume =  $131 \text{ cm}^3$ , Surface area =  $83.8 \text{ cm}^2$

6) Volume =  $512 \text{ cm}^3$

7) Surface area =  $384 \text{ cm}^2$

8) Volume =  $1380 \text{ cm}^3$

9) Surface area =  $321 \text{ cm}^2$