1) Find the volume and surface area of the cube

2) Find the volume and surface area of the cuboid
3) Find the volume and surface area of the cylinder, rounding your answers to 3 significant figures

4) Find the volume and surface area of the sphere, rounding your answers to 3 significant figures
5) Find the volume and surface area of the solid cone, rounding your answers to 3 significant figures

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

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

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

1) Volume = 216 cm$^3$, Surface area = 216 cm$^2$

2) Volume = 200 cm$^3$, Surface area = 210 cm$^2$

3) Volume = 785 cm$^3$, Surface area = 471 cm$^2$

4) Volume = 3050 cm$^3$, Surface area = 1020 cm$^2$

5) Volume = 131 cm$^3$, Surface area = 83.8 cm$^2$

6) Volume = 512 cm$^3$

7) Surface area = 384 cm$^2$

8) Volume = 1380 cm$^3$

9) Surface area = 321 cm$^2$