

## 6.5 Missing measures of a solid

Sometimes... we know the **Volume** or **Surface Area** of an object and we need to find the radius, height or side length.

When looking for a missing measure of a solid:

1. choose and write down the applicable formula based on the information given
2. substitute in all known values
3. solve for the unknown value

1

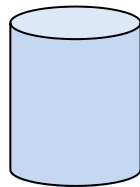
## Ex 1: Find the radius of the sphere



$$V=2028\pi \text{ cm}^3$$

2

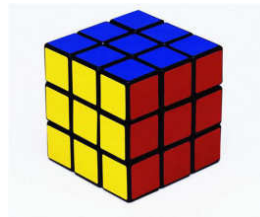
## Ex 2: Find the height of the cylinder



$$A_T=26.39 \text{ m}^2$$
$$r= 1.2 \text{ m}$$

3

## Ex 3: Find the side length of the cube



$$V=185.2 \text{ cm}^3$$

4

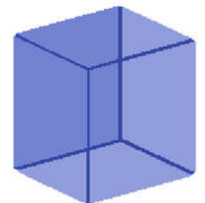
## Ex 4: Find the radius of the cylinder



$$V= 124181 \text{ cm}^3$$
$$h=122 \text{ cm}$$

5

## Ex 5: Find the side length of the cube



$$A_T=294 \text{ cm}^2$$

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