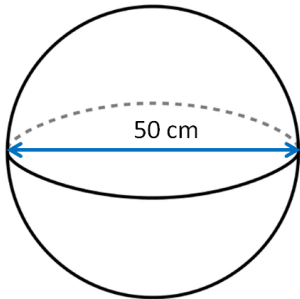# <u>Volume</u>

The volume of a three-dimensional object is the amount of space the object takes up, or the amount the object could hold (capacity).

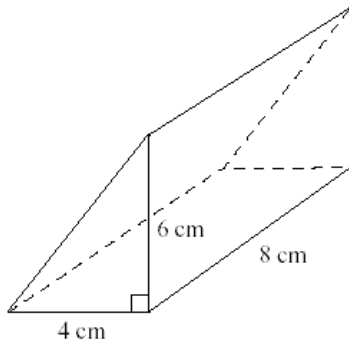Example 1   Find the volume of the following sphere.

50 cm

Example 2   Convert the volume you found in Example 1 to cubic feet

.

The volume of prisms and cylinders can be found using the following strategy:
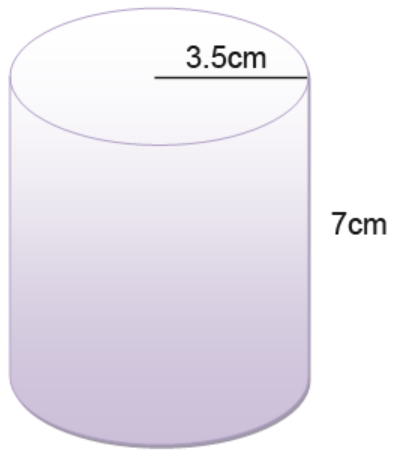
Volume = Area of the "base" × Height/Depth

Example 2   Find the volume of each figure.

a.

6 cm

8 cm

4 cm

b.

3.5cm

7cm

Example 3   A hockey puck has a diameter of 3 in. and a height of 1 in. A cylindrical container holds
a stack of four pucks. What is the minimum volume of this container, to the nearest
cubic centimetre?