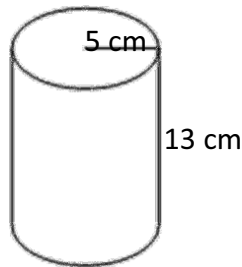


### 6.3-C- Volume of a Cylinder

$$V_{\text{cylinder}} = \pi r^2 h$$

Ex 1: Determine the volume of this cylinder

$$V = \pi r^2 \cdot h$$



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$$V_{\text{cylinder}} = \pi r^2 h$$

Ex 2: Find the volume of this hot air balloon

$$D = 14 \text{ m}$$

$$R = 7 \text{ m}$$

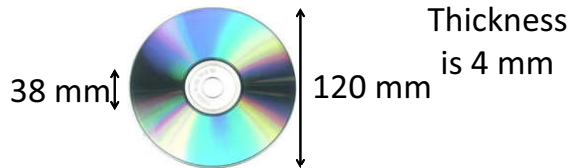
$$H = 35 \text{ m}$$



Diameter = 14 m  
Height is 2.5 times the diameter

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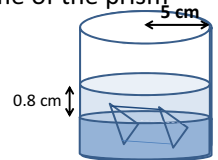
Ex 3: Determine the volume of material required to make a cd in ml



$$r = 19 \text{ mm}$$
$$R = 60 \text{ mm}$$
$$h = 4 \text{ mm}$$

Ex 4: page 196 # 41

A triangular base prism is submerged in a cylindrical bucket of water with a 5 cm radius. The water level in the bucket rises 0.8 cm. What is the volume of the prism submerged in the water?



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Worksheet

+

page 195 # 31, 37, 39



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