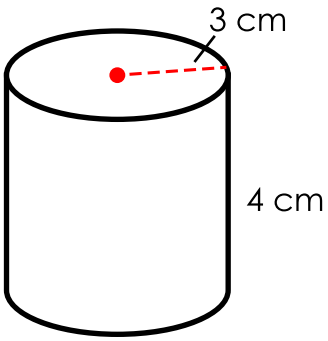
Name: _____

Volume of a Cylinder



A cylinder has a circular base. Use $A = \pi r^2$ to find the area of the base.

$A \approx 3.14 \times 3^2$
$A \approx 3.14 \times 9$
$A \approx 28.26 \text{ cm}^2$

The volume of the cylinder is equal to its base area times its height.

$V \approx 28.26 \text{ cm}^2 \times 4 \text{ cm}$
$V \approx 113.04 \text{ cm}^3$

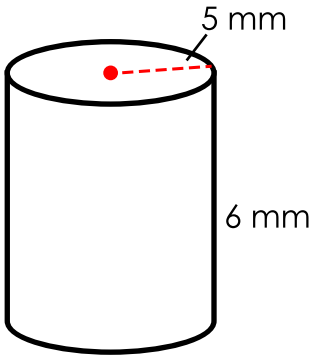
The formula for finding the volume of a cylinder can be expressed as:

Volume = pi × radius squared × height

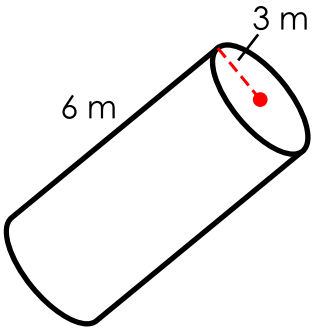
$V = \pi r^2 h$

Find the volume of each cylinder. Use 3.14 for π.
Round your answer to the nearest tenth.

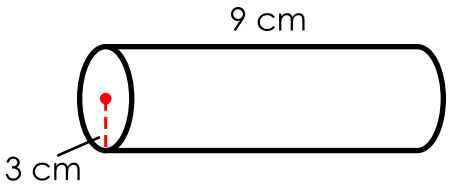
1.



2.



3.



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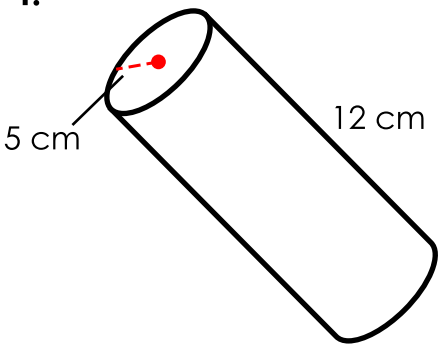
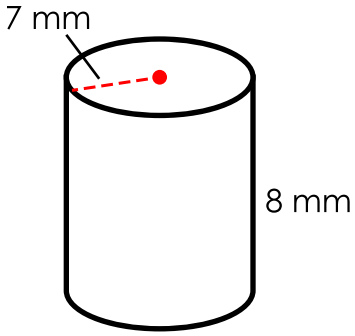
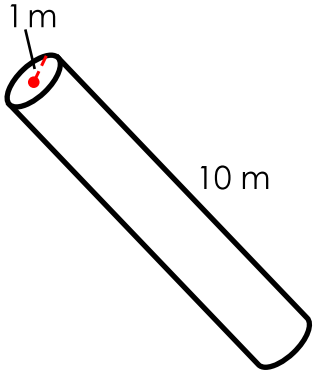


5.

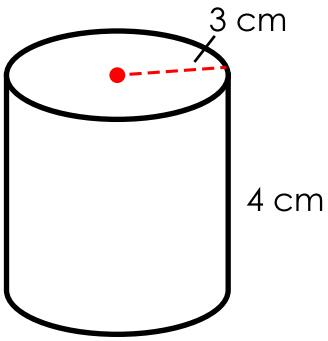


6.



ANSWER KEY

Volume of a Cylinder



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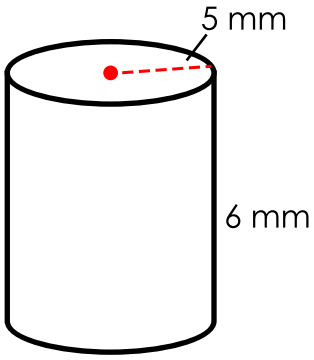
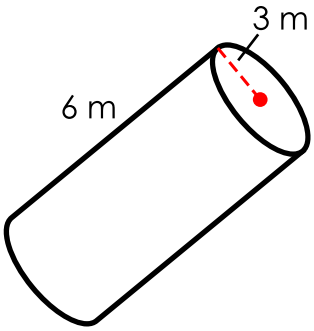
1.



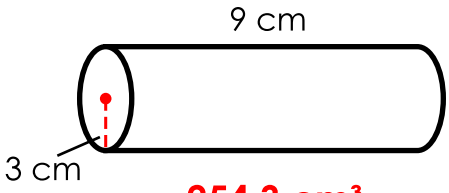
471 mm³

2.



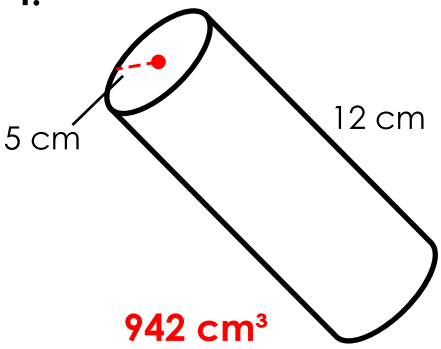
169.6 m³

3.



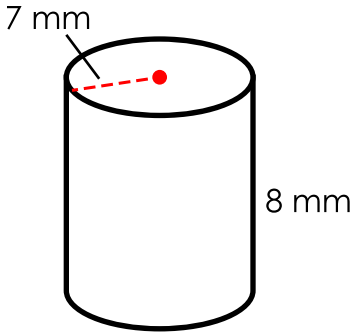
254.3 cm³

4.



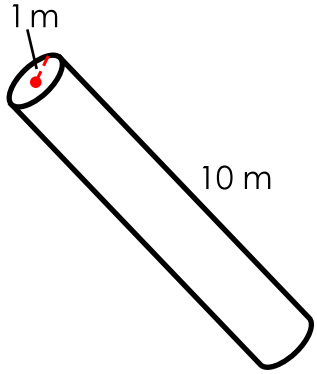
942 cm³

5.



1,230.9 mm³

6.



31.4 m³