Volume of a Cylinder

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

\[
\begin{align*}
A &\approx 3.14 \times 2^2 \\
A &\approx 3.14 \times 4 \\
A &\approx 12.56 \text{ cm}^2
\end{align*}
\]

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

\[
V \approx 12.56 \text{ cm}^2 \times 5.3 \text{ cm} \\
V \approx 66.57 \text{ cm}^3
\]

4. 
3 cm
12.4 cm

5. 
7 mm

6. 
0.5 m
8.1 m
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4. $381.82 \text{ mm}^3$
5. $16.33 \text{ m}^3$
6. $6.36 \text{ m}^3$