

7.4 Learning Opportunity

Volume of cylinders

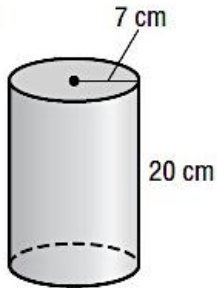


Name: _____

Find the volume of each cylinder shown below. I have done the first one for you as an example. You **must** write the formulas you use (as shown in my example), but you may use a calculator for your computations. Don't forget to include the proper units in your answer.

(When necessary, use $\pi \approx 3.14$).

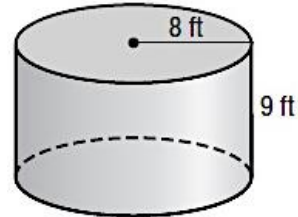
1.



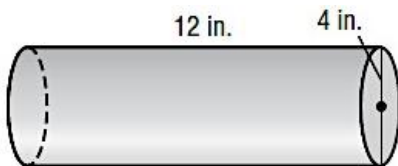
$$\begin{aligned} B &= \pi r^2 \\ B &\approx 3.14(7)^2 \\ B &\approx 3.14(49) \\ B &\approx 153.86 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} V &= Bh \\ V &\approx 153.86(20) \\ V &\approx 3077.2 \text{ cm}^3 \end{aligned}$$

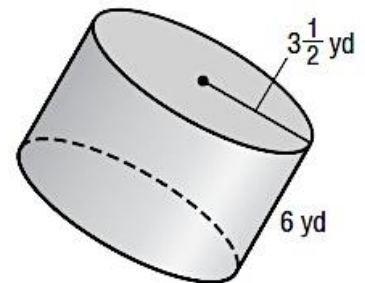
2)



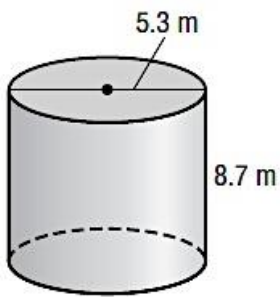
3)



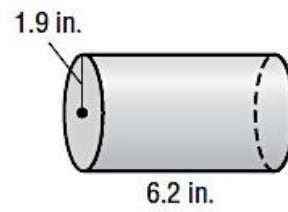
4)



5)



6)



- 7) Find the height of a cylinder with a radius of 12 inches and a volume of 3754.8 in^3 . Round to the nearest tenth.