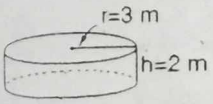
Name _____

Volume of a Cylinder

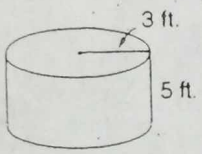
To find the volume of a cylinder, use the formula **Volume = Base • height,** where B is the area of the base and h is the height.



Step #1 Find the Area of the Base	Step #2 Find the Volume
$B = \pi r^2$ $B = 3.14 \cdot 3\ m^2$ $B = 28.26\ m^2$	Volume = Base • height Volume = $28.26\ m^2 \cdot 2\ m$ Volume = $56.52\ m^3$

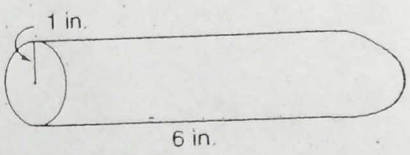
Find the volume of each cylinder. Use the formula **V = B • h.** Write your answer in terms of π. Round your answers to the nearest hundredth.

A.



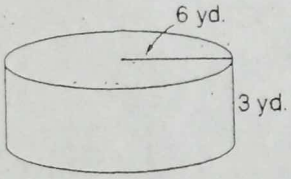
V = _____

B.



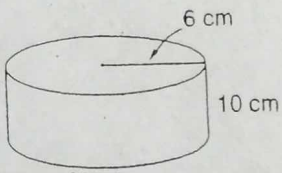
V = _____

C.



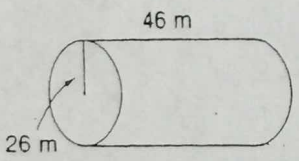
V = _____

D.



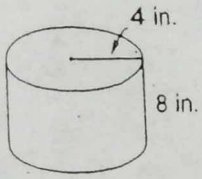
V = _____

E.



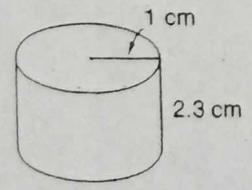
V = _____

F.



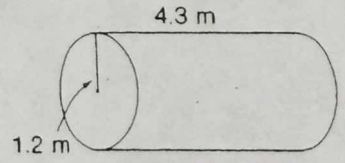
V = _____

G.



V = _____

H.



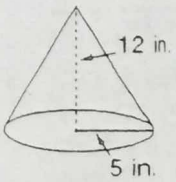
V = _____

20

Name _____ Volume

Volume of a Cone

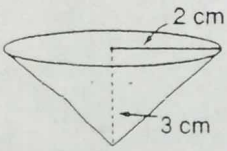
To find the volume of a cone, use the formula **Volume** = $\frac{1}{3}$ • **Base** • **height**, where B is the area of the base and h is the height of the cone.



Step #1 Find the Area of the Base	Step #2 Find the Volume
$B = \pi \cdot r^2$	$V = \frac{1}{3} \cdot \text{Base} \cdot \text{height}$
$B = 3.14 \cdot 5 \text{ in.} \cdot 5 \text{ in.}$	$V = \frac{1}{3} \cdot 78.5 \text{ in.}^2 \cdot 12 \text{ in.}$
$B = 3.14 \cdot 25 \text{ in.}^2$	$V = 314 \text{ in.}^3$
$B = 78.5 \text{ in.}^2$	

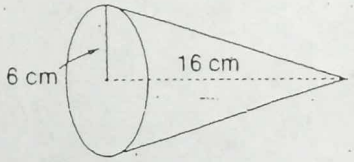
Find the volume of each cone. Use the formula $V = B \cdot h$. Write your answer in terms of π. Round your answers to the nearest hundredth.

A.



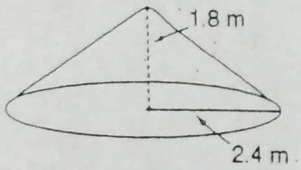
V = _____

B.



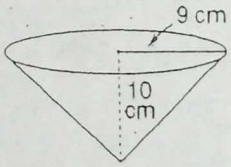
V = _____

C.



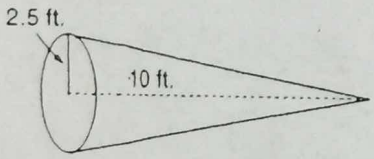
V = _____

D.



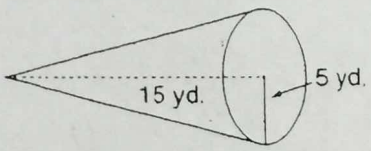
V = _____

E.



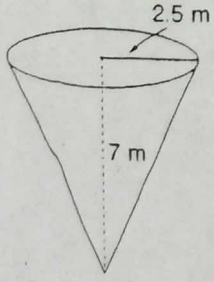
V = _____

F.



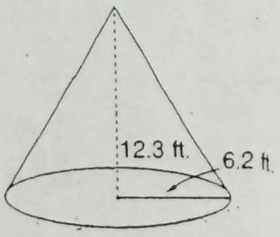
V = _____

G.



V = _____

H.



V = _____