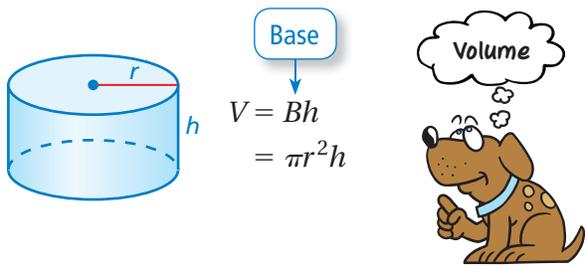


REVIEW: Volumes of Cylinders

Name _____

Key Concept and Vocabulary



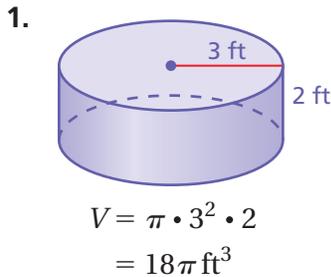
Visual Model

If each coin has a volume of πr^2 , then h coins have a volume of

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



Skill Example

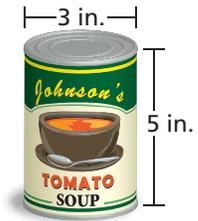


Application Example

2. How much soup is in the can?

$$V = \pi \cdot 1.5^2 \cdot 5$$

$$= 11.25\pi \text{ in.}^3$$



∴ There are 11.25π cubic inches of soup.

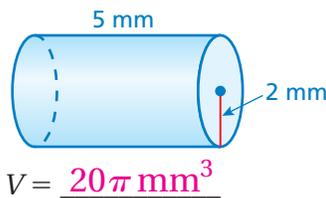
PRACTICE MAKES PURR-FECT™



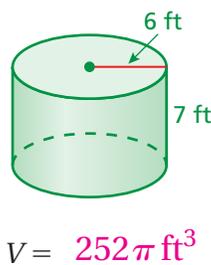
Check your answers at BigIdeasMath.com.

Find the volume of the circular cylinder.

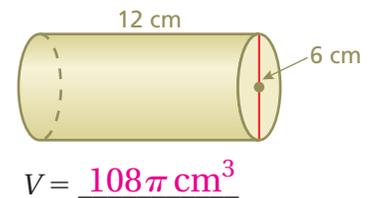
3. Circular Cylinder



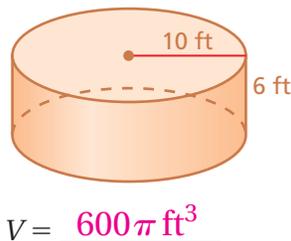
4. Circular Cylinder



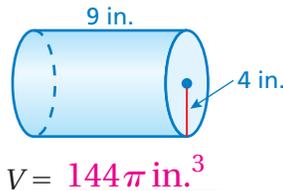
5. Circular Cylinder



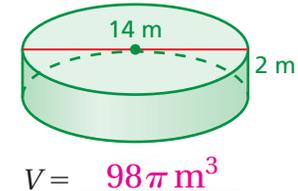
6. Circular Cylinder



7. Circular Cylinder



8. Circular Cylinder



9. **OIL TANKER TRUCK** The truck's tank is a stainless steel cylinder.

How much oil does the tank hold? $\underline{800\pi \text{ ft}^3}$

10. **OIL TANKER TRUCK** There are about 7.5 gallons in 1 cubic foot. How many gallons of oil can the tank hold? $\underline{\text{about } 18,840 \text{ gal}}$



Length = 50 ft
Radius = 4 ft