

Name: Key
Mrs. Roubos

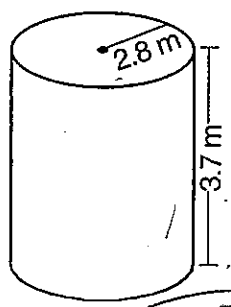
Date: _____

8R Period _____

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

Volume of a cylinder
Homework
***Show work!!

1) What is the volume of the cylinder below to the nearest meter³?



use π button

- A) 24 m³
- B) 98 m³
- C) 91 m³
- D) 48 m³

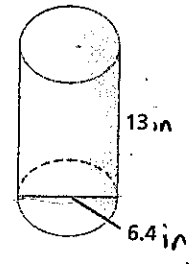
$$V = \pi r^2 h$$

$$V = \pi \cdot (2.8)^2 \cdot (3.7)$$

$$V = \pi \cdot (7.84) \cdot (3.7)$$

$$V = 91 \text{ m}^3$$

3) What is the volume of the cylinder below to the nearest inch³? $\pi = 3.14$



$$R = \frac{D}{2}$$

$$R = \frac{6.4}{2}$$

$$R = 3.2$$

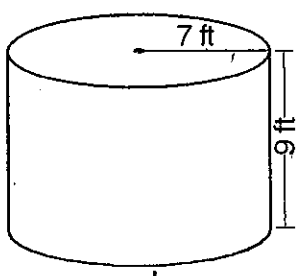
$$V = \pi r^2 h$$

$$V = 3.14 \cdot (3.2)^2 \cdot (13)$$

$$V = 3.14 (10.24)(13)$$

$$V = 418 \text{ in}^3$$

2) What is the volume of the cylinder below to the nearest tenth



use π button

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

$$V = \pi \cdot (7)^2 \cdot (9)$$

$$V = \pi \cdot 49 \cdot 9$$

$$V = 385$$

$$V = 1385.4 \text{ ft}^3$$

4) Find in terms of π , the volume of a right circular cylinder whose height is 10 inches and whose radius is 3 inches.

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

$$V = \pi \cdot (3)^2 \cdot (10)$$

$$V = \pi \cdot (9 \cdot 10)$$

$$V = 90\pi \text{ in}^3$$