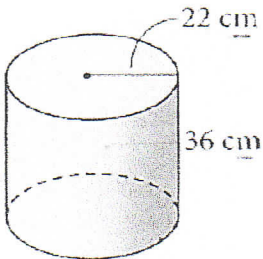


Measurement: Volume of Cylinders, Cones, & Spheres

Date: Notes

Example 1: Calculate the volume of the cylinder (round to 1 decimal place)



$$r = 22 \text{ cm}$$

$$h = 36 \text{ cm}$$

$$\pi = 3.14$$

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

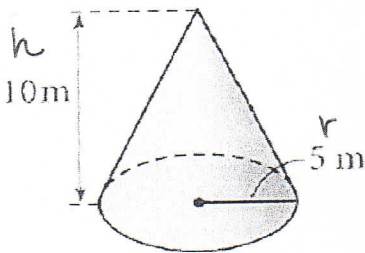
$$V = (3.14) (22)^2 (36)$$

$$V = (3.14) (484) (36)$$

$$V = 54711.36 \text{ cm}^3$$

54711.4 cm³ ← Rounded.
Remember 3 exponent

Example 2: Calculate the volume of the cone (round to 1 decimal place)



$$\pi = 3.14$$

$$r = 5 \text{ m}$$

$$h = 10 \text{ m}$$

$$V = \frac{\pi r^2 h}{3}$$

$$V = \frac{(3.14) (5)^2 (10)}{3}$$

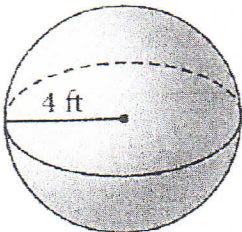
$$V = \frac{(3.14) (25) (10)}{3}$$

$$V = \frac{785}{3}$$

$$V = 261.66$$

$$V = 261.7 \text{ m}^3$$

Example 3: Calculate the volume of a sphere



$$\pi = 3.14$$

$$r = 4$$

$$V = \frac{4\pi r^3}{3}$$

$$V = \frac{4(3.14)(4)^3}{3}$$

$$V = \frac{4(3.14)(64)}{3}$$

$$V = \frac{803.84}{3}$$

$$V = 267.946$$

$$V = 267.95 \text{ ft}^3$$