

Name _____

Date _____

Mrs. Roubos

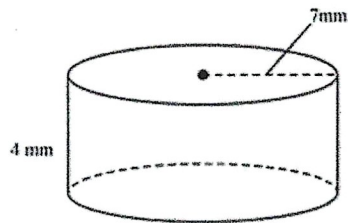
8R Period _____

Extra Review for Volume Quiz

Formulas: Cylinder: $V = \pi r^2 h$ Cone: $V = \frac{1}{3} \pi r^2 h$ Sphere: $V = \frac{4}{3} \pi r^3$ Diameter: $d = 2r$ Radius: $r = \frac{d}{2}$

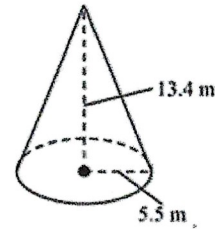
1)

Find the volume of the cylinder. Round your answer to the nearest tenth.



2)

Find the volume of the cone. Use 3.14 for π . Round your answer to the nearest tenth.



3)

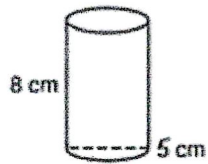
To the nearest tenth, find the volume of a sphere with a diameter of 10 cm. Use 3.14 for π .

4)

A cone has a diameter of 6 inches and a height of 6 inches. Find the volume of the cone to the nearest tenth. Leave your answer in terms of π .

5)

Find the volume of the cylinder.

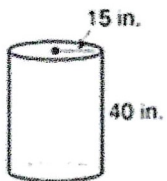


6)

Find the volume of a sphere with a radius of 6 cm to the nearest tenth. Use 3.14 for π .

7)

Find the volume of the cylinder.

Leave your answer in terms of π

8)

A cylinder is 5 centimeters tall and has a radius of 2.1 centimeters. Find the volume to the nearest tenth. Use 3.14 for π .

9) What is the diameter of a circle whose radius is 2?

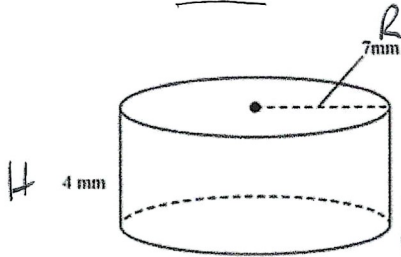
10) What is the circumference of a circle whose diameter is 10? Keep your answer in terms of π .

11) What is the area of a circle whose diameter is 12ft. Round your answer to the nearest tenth.

Extra Review for Volume Quiz

Formulas: Cylinder: $v = \pi r^2 h$ Cone: $v = \frac{1}{3} \pi r^2 h$ Sphere: $v = \frac{4}{3} \pi r^3$
 Diameter: $d = 2r$ radius: $r = \frac{d}{2}$

1) Find the volume of the cylinder. Round your answer to the nearest tenth.



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

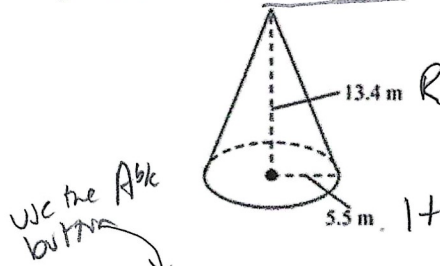
$$V = \pi \cdot (7)^2 \cdot 4$$

$$V = \pi \cdot 49 \cdot 4$$

$$V = 615.8 \text{ mm}^3$$

* Use the π button since it doesn't say what to use for π

2) Find the volume of the cone. Use 3.14 for π . Round your answer to the nearest tenth.



Use the π button

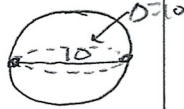
$$V = \frac{1}{3} \pi r^2 h$$

$$V = \frac{1}{3} \cdot (3.14) \cdot (5.5)^2 \cdot (13.4)$$

$$V = \frac{1}{3} \cdot (3.14) \cdot (30.25) \cdot (13.4)$$

$$V = 424.3 \text{ m}^3$$

3) To the nearest tenth, find the volume of a sphere with a diameter of 10 cm. Use 3.14 for π .



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

$$V = \frac{4}{3} \cdot (3.14) \cdot (5)^3$$

$$V = \frac{4}{3} \cdot (3.14) \cdot (125)$$

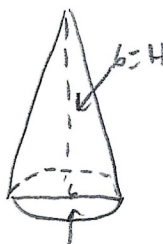
$$V = 523.3 \text{ cm}^3$$

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

$$R = \frac{10}{2}$$

$$R = 5$$

4) A cone has a diameter of 6 inches and a height of 6 inches. Find the volume of the cone to the nearest tenth. Leave your answer in terms of π .



$$D = 6$$

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

$$R = \frac{6}{2}$$

$$R = 3$$

$$V = \frac{1}{3} \pi r^2 h$$

$$V = \frac{1}{3} \cdot \pi \cdot (3)^2 \cdot 6$$

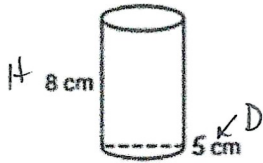
$$V = \frac{1}{3} \cdot \pi \cdot 9 \cdot 6$$

$$V = 18\pi \text{ in}^3$$

* means to use the π symbol. Don't multiply just bring down

* multiply everything but π

5) Find the volume of the cylinder.



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

$$R = \frac{5}{2}$$

$$R = 2.5$$

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

$$V = \pi \cdot (2.5)^2 (8)$$

$$V = \pi \cdot (6.25) (8)$$

$$V = 157 \text{ cm}^3$$

Use the π -button
Bk it
don't
say what
to use
for π

6) Find the volume of a sphere with a radius of 6 cm to the nearest tenth. Use 3.14 for π .



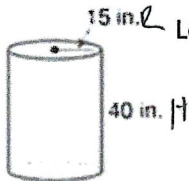
$$V = \frac{4}{3} \pi r^3$$

$$V = \frac{4}{3} \cdot (3.14) \cdot (6)^3$$

$$V = \frac{4}{3} \cdot (3.14) (216)$$

$$V = 904.3 \text{ cm}^3$$

7) Find the volume of the cylinder. Leave your answer in terms of π



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

$$V = \pi \cdot (15)^2 (40)$$

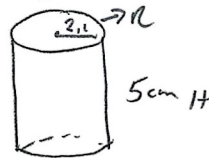
$$V = \pi \cdot (225 \cdot 40)$$

$$V = 9000 \pi \text{ in}^3$$

Use the π -symbol.
Just bring down don't multiply by π

Multiply everything but π

8) A cylinder is 5 centimeters tall and has a radius of 2.1 centimeters. Find the volume to the nearest tenth. Use 3.14 for π .



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

$$V = (3.14) (2.1)^2 (5)$$

$$V = (3.14) (4.41) (5)$$

$$V = 69.2 \text{ cm}^3$$

9) What is the diameter of a circle whose radius is 2?

$$D = 2r$$

$$D = 2(2)$$

$$D = 4$$

10) What is the circumference of a circle whose diameter is 10? Keep your answer in terms of π .

$$C = \pi d$$

$$C = \pi \cdot 10$$

$$C = 10\pi$$

11) What is the area of a circle whose diameter is 12ft. Round your answer to the nearest tenth.

$$A = \pi r^2$$

$$A = \pi \cdot (6)^2$$

$$A = \pi \cdot 36$$

$$A = 113.1 \text{ ft}^2$$

Use the π -button when this don't say what to use for π

Formulas for a circle: Circumference: $C = \pi d$

Area: $A = \pi r^2$