

Volume of a Cone

Name: _____

Date: _____

Solve the problems.

- 1) The height and diameter of a cone-shaped bottle are 1 feet and 2 feet respectively. Find the volume of water the bottle can hold. Use ($\pi = 3.14$).

1.04 \approx 1 ft³

- 2) Calculate the volume of a cone if the height is 12 cm and the radius is 7 cm

- 3) Find the volume of a cone whose height is 5 cm and slant length is 13 cm.

- 4) The height and radius of a cone-shaped bottle are 2 feet and 4 feet respectively. Find the volume of water the bottle can hold. Use ($\pi = 3.14$).

- 5) A container is shaped like a cone and contains oil. The radius is 5 feet and the height is 7 feet. If the container can release oil from its bottom at the rate of 20 cubic feet per minute, how long would it take for the container to empty fully? Use ($\pi = 3.14$).

- 6) Find the volume of a cone having the radius of the base as 10 cm and the height of the cone is 12 cm?

- 7) Calculate the volume of a cone having the radius of the base as 6 cm and the height of the cone is 10 cm?

- 8) Find the radius of a cone having the volume of 30 cm³ and the height of the cone is 8 cm?

- 9) Find the volume of a cone having the radius of the base as 7 m and the height of the cone is 9 m?

- 10) Calculate the height of a cone whose volume is 301.44 cm³, radius is 6cm and slant length is 10 cm.

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- 1) The height and diameter of a cone-shaped bottle are 1 feet and 2 feet respectively. Find the volume of water the bottle can hold. Use ($\pi = 3.14$).

$$\underline{1.04 \approx 1 \text{ ft}^3}$$

- 2) Calculate the volume of a cone if the height is 12 cm and the radius is 7 cm

$$\underline{615.44 \approx 615 \text{ cm}^3}$$

- 3) Find the volume of a cone whose height is 5 cm and slant length is 13 cm.

$$\underline{753.6 \approx 754 \text{ cm}^3}$$

- 4) The height and radius of a cone-shaped bottle are 2 feet and 4 feet respectively. Find the volume of water the bottle can hold. Use ($\pi = 3.14$).

$$\underline{33.49 \approx 33 \text{ ft}^3}$$

- 5) A container is shaped like a cone and contains oil. The radius is 5 feet and the height is 7 feet. If the container can release oil from its bottom at the rate of 20 cubic feet per minute, how long would it take for the container to empty fully? Use ($\pi = 3.14$).

$$\underline{9.158 \approx 9 \text{ minutes}}$$

- 6) Find the volume of a cone having the radius of the base as 10 cm and the height of the cone is 12 cm?

$$\underline{1256 \text{ cm}^3}$$

- 7) Calculate the volume of a cone having the radius of the base as 6 cm and the height of the cone is 10 cm?

$$\underline{376.8 \approx 377 \text{ cm}^3}$$

- 8) Find the radius of a cone having the volume of 30 cm^3 and the height of the cone is 8 cm?

$$\underline{1.89 \approx 2 \text{ cm}}$$

- 9) Find the volume of a cone having the radius of the base as 7 m and the height of the cone is 9 m?

$$\underline{461.58 \approx 462 \text{ m}^3}$$

- 10) Calculate the height of a cone whose volume is 301.44 cm^3 , radius is 6cm and slant length is 10 cm.

$$\underline{8 \text{ cm}}$$