

Volume of a Cone

Name: _____

Date: _____

Solve the problems.

- 1) Find the volume of a circular cone whose height is 4 m and slant length is 5 m.

- 2) Find the height of a cone whose volume is 12 cm^3 and radius 2 cm.

- 3) Find the volume of a cone whose height is 24 cm and slant length is 25 cm.

- 4) A container is shaped like a cone and contains oil. The radius is 7 feet and the height is 8 feet. If the container can release oil from its bottom at the rate of 12 cubic feet per minute, how long would it take for the container to empty fully? Use ($\pi = 3.14$).

- 5) Calculate the volume of a cone having the radius of the base as 7 m and the height of the cone is 13 m?

- 6) Find the radius of a cone whose volume is 8.37 cm^3 and height 2 cm.

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

- 8) Calculate the height of a cone whose volume is 37680 cm^3 , radius 30 cm and slant length is 50 cm.

- 9) Find the volume of a cone having the radius of the base as 9 m and the height of the cone is 15 m?

- 10) Find the height of a cone having the radius of the base as 5 cm and the volume of a cone is 44 cm^3 ?

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Solve the problems.

- 1) Find the volume of a circular cone whose height is 4 m and slant length is 5 m.

$$\underline{37.68 \approx 38 \text{ m}^3}$$

- 2) Find the height of a cone whose volume is 12 cm^3 and radius 2 cm.

$$\underline{1.69 \approx 2 \text{ cm}}$$

- 3) Find the volume of a cone whose height is 24 cm and slant length is 25 cm.

$$\underline{1230.88 \approx 1231 \text{ cm}^3}$$

- 4) A container is shaped like a cone and contains oil. The radius is 7 feet and the height is 8 feet. If the container can release oil from its bottom at the rate of 12 cubic feet per minute, how long would it take for the container to empty fully? Use ($\pi = 3.14$).

$$\underline{34.19 \approx 34 \text{ minutes}}$$

- 5) Calculate the volume of a cone having the radius of the base as 7 m and the height of the cone is 13 m?

$$\underline{666.72 \approx 667 \text{ m}^3}$$

- 6) Find the radius of a cone whose volume is 8.37 cm^3 and height 2 cm.

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

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

$$\underline{3.18 \approx 3 \text{ cm}}$$

- 8) Calculate the height of a cone whose volume is 37680 cm^3 , radius 30 cm and slant length is 50 cm.

$$\underline{40 \text{ cm}}$$

- 9) Find the volume of a cone having the radius of the base as 9 m and the height of the cone is 15 m?

$$\underline{1271.7 \approx 1272 \text{ m}^3}$$

- 10) Find the height of a cone having the radius of the base as 5 cm and the volume of a cone is 44 cm^3 ?

$$\underline{1.68 \approx 1.7 \text{ cm}}$$