

Name _____

Date _____ Period _____

Math 8 - Measurement

Finding Height

Independent Practice for *Finding the Height* Lesson

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

Directions – Work on this page or your own piece of paper to answer each of the following. **Use ESA.**

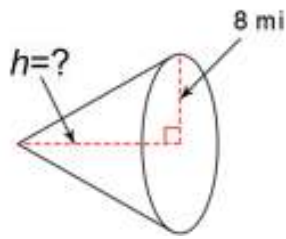
1) What is the height of cylinder that has a volume of $18\pi \text{ cm}^3$ and a radius of 3 cm?

2) What is the height of a cone that has a volume of $100\pi \text{ in}^3$ and a radius of 5 in?

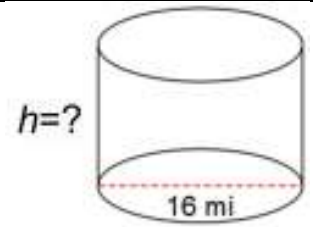
3) Calculate the height of a cone with a radius of 21 mm and a volume of $2,909.43 \text{ mm}^3$? Round your answer to the nearest tenths place.

4) Calculate the height of a cylinder with a radius of 5.5 cm and a volume of 826.79 cm^3 ? Round your answer to the nearest tenths place.

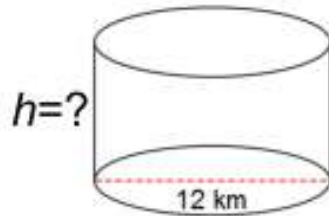
5) If the volume of the cone is 172.3 mi^3 , what is the height? Round to the nearest whole mile.



6) If the volume of the cylinder is $2,211.7 \text{ mi}^3$, what is the height? Round to the nearest whole mile.



7) If the volume is 791.7 km^3 , what is the height rounded to the nearest whole kilometer?



8) If the volume of the cone is 452.4 ft^3 , what is the height rounded to the nearest whole foot?

