

Name: _____

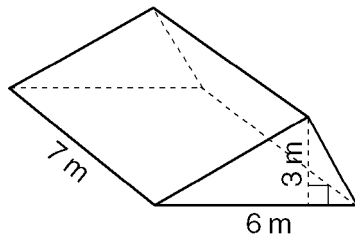
CC Geometry Homework

Volume of Prisms and Cylinders

- 1) What is the volume of a cube with a side measuring 8 centimeters?

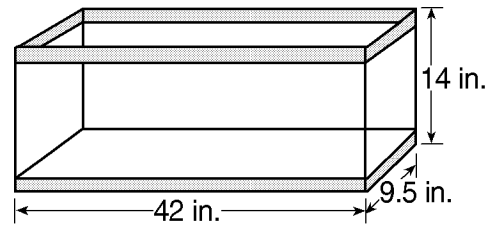
A) 64 cm^3 C) 312 cm^3
 B) 512 cm^3 D) 200.96 cm^3

- 2) What is the volume of the triangular prism below?



A) 189 m^3 C) 126 m^3
 B) 63 m^3 D) 42 m^3

- 3) Mary was instructed that she must keep the water level in her aquarium 2.25 inches from the top of the aquarium.

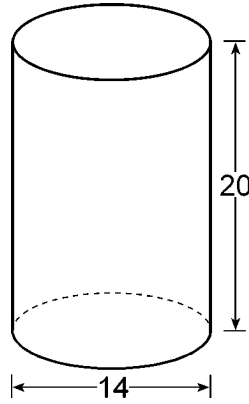


When the aquarium is filled to the proper level, how many cubic inches of water will it contain?

A) $4,688.25 \text{ in.}^3$ C) $5,586 \text{ in.}^3$
 B) $3,366 \text{ in.}^3$ D) $5,087.25 \text{ in.}^3$

- 4) Find, in terms of π , the volume of a right circular cylinder whose height is 10 inches and whose radius is 3 inches.

- 5) Find, to the *nearest* tenth, the volume of the right circular cylinder shown in the accompanying diagram.



- 6) A right circular cylinder has a volume of 960π inches³ and an altitude of 15 inches. What is the length of the radius of the cylinder? [*Show all work.*]

1) B 2) B 3) A

4) $90\pi \text{ in.}^3$

5) $3,078.8 \text{ units}^3$

6) 8 in.

WORK SHOWN: $V = \pi r^2 h$, $960\pi = \pi(r^2)(15)$, $64 = r^2$, $r = 8$