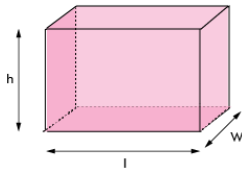


Math 9 Adapted LG 6

Expectation 1 – Calculating the Volume of a Rectangular Prism

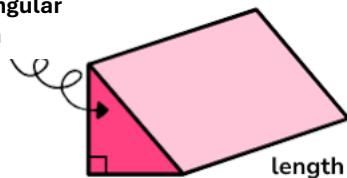


Volume = length x width x height

Volume = _____	Volume = _____	Volume = _____
Volume = _____	Volume = _____	Volume = _____
Volume = _____	Volume = _____	Volume = _____

Expectation 2 - Calculating the Volume of a Triangular Prism

Triangular
area



Volume of triangular prism = Triangular Area x Height

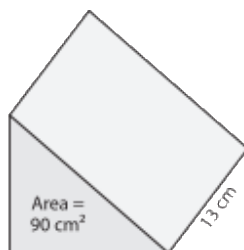
Find the volume of each triangular prism.

1)



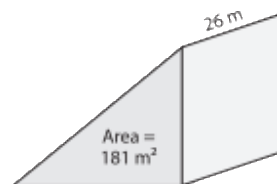
Volume = _____

2)



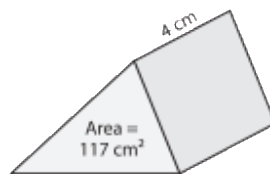
Volume = _____

3)



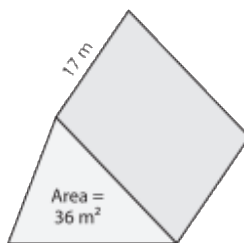
Volume = _____

4)



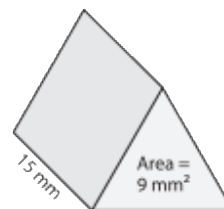
Volume = _____

5)



Volume = _____

6)

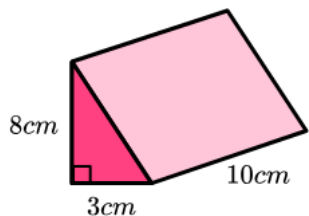


Volume = _____

7) The base area of a triangular prism is 55 cm^2 . Find the volume if its length is 20 cm.

8) A triangular prism has a height of 16 m and a base with area of 169 m^2 . What is its volume?

Volume by calculating base area of the triangle, then multiplying the length.

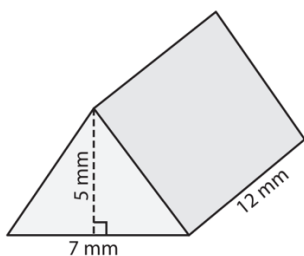


$$\text{Area of triangle} = \text{base} \times \text{height} \div 2$$

$$\text{Area of triangle} = 3 \text{ cm} \times 8 \text{ cm} \div 2 = 12 \text{ cm}^2$$

$$\begin{aligned} \text{Volume} &= 12 \text{ cm}^2 \times 10 \text{ cm} \\ &= 120 \text{ cm}^3 \end{aligned}$$

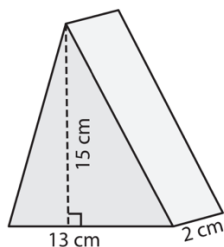
1)



Triangle area =

Volume =

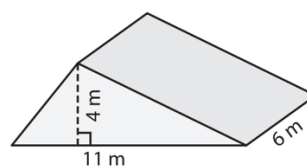
2)



Triangle area =

Volume =

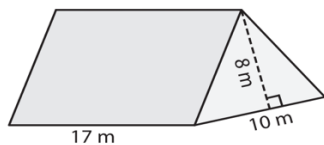
3)



Triangle area =

Volume =

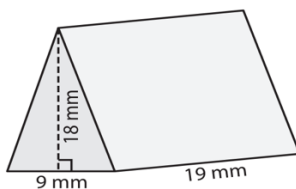
4)



Triangle area =

Volume =

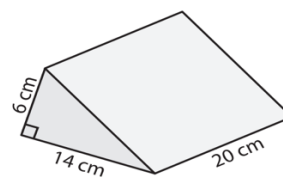
5)



Triangle area =

Volume =

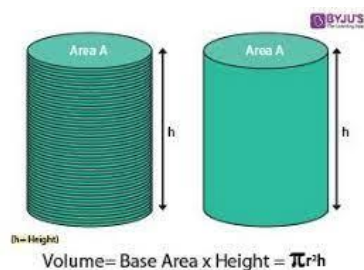
6)



Triangle area =

Volume =

Expectation 3 - Calculating Volume of a Cylinder

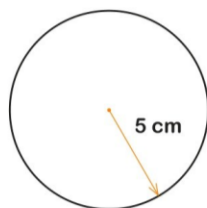


Area of a circle = $\pi \times r \times r$

Volume = Area circle x height

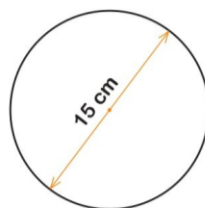
1) Find the area of the circles. Give your answers to 3 decimal places.

a)



Area = _____

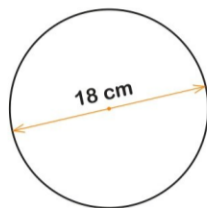
b)



Area = _____

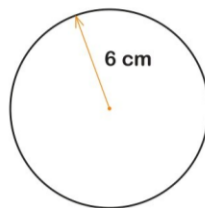
2) Find the area of the circles. Give your answers in terms of π .

a)



Area = _____

b)

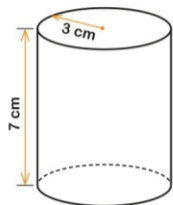


Area = _____

Section B

1) Find the volume of the cylinders. Give your answers to 2 decimal places.

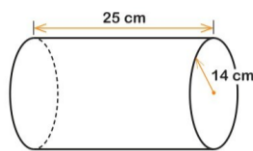
a)



Area of circle:

Volume:

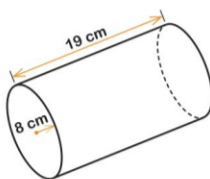
b)



Area of circle:

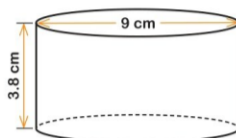
Volume:

c)



Volume:

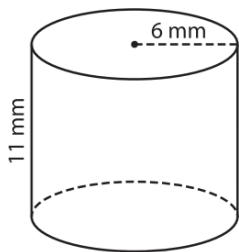
d)



Volume:

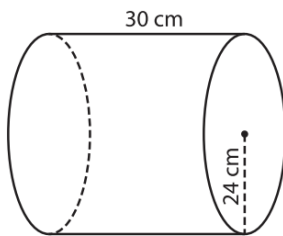
Math 9 Adapted LG 6 – Volume of 3D Objects

Calculate the volume of the cylinders.



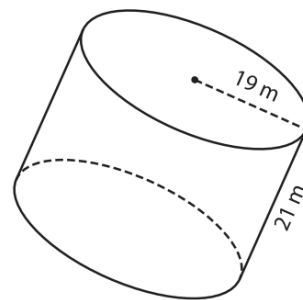
Area of circle =

Volume =



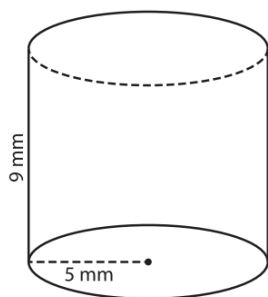
Area of circle =

Volume =



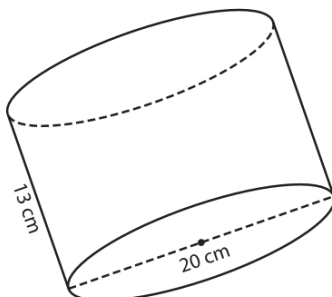
Area of circle =

Volume =



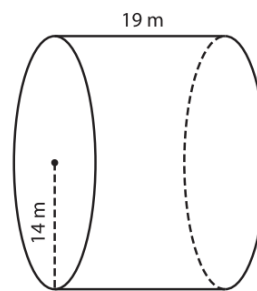
Area of circle =

Volume =



Area of circle =

Volume =



Area of circle =

Volume =

4) height = 9 cm ; radius = 3 cm

5) radius = 13 m ; height = 8 m

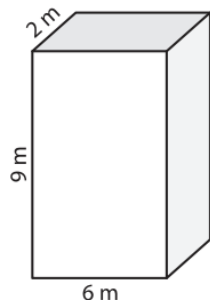
Volume = _____

Volume = _____

Math 9 Adapted LG 6 – Volume of 3D Objects

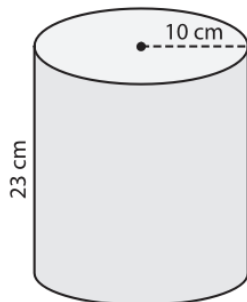
Calculate the volume of the 3D objects below.

1)



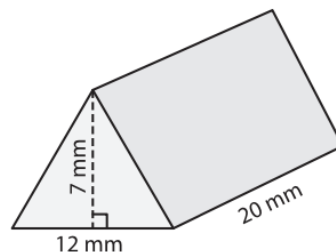
Volume = _____

2)



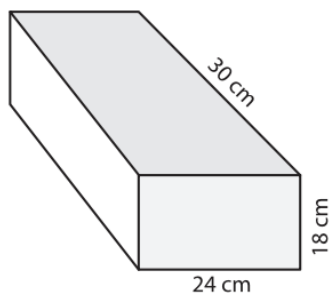
Volume = _____

3)



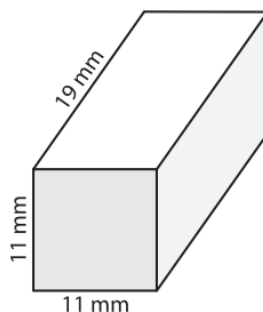
Volume = _____

4)



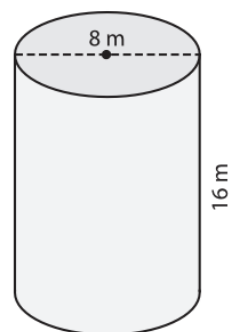
Volume = _____

5)



Volume = _____

6)



Volume = _____

- 7) The radius and height of a cylinder are 21 m and 5 m respectively. What is the volume of the cylinder?
(use $\pi = 3.14$)

- 8) The base of a prism is a right triangle with legs measuring 3 cm and 4 cm. If the height of the prism is 13 cm, determine its volume.