

STUDY LINK
9•9

Area and Volume Problems


Area formulas

Rectangle:

$$A = b * h$$

Parallelogram:

$$A = b * h$$

Triangle:

$$A = \frac{1}{2} * b * h$$

Volume formulas

Cylinder:

$$V = B * h = \pi * r^2 * h$$

Rectangular prism:

$$V = B * h = l * w * h$$

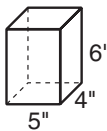
Sphere:

$$V = \frac{4}{3} * \pi * r^3$$

 A = area V = volume B = area of base C = circumference b = length of base h = height l = length w = width r = radius
Circumference formula $C = 2\pi r$

Calculate the area or volume of each figure. Pay close attention to the units.

1.


 Volume _____
 (unit)

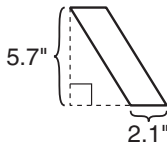
2.



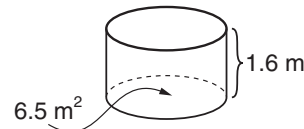
diameter = 12"

Use 3.14 for π .
 Volume _____
 (unit)

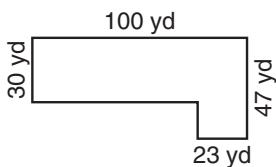
3.


 Area _____
 (unit)

4.

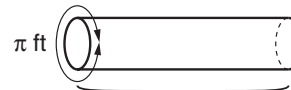
Use 3.14 for π .
 Volume _____
 (unit)

5.


 Area _____
 (unit)

Try This

6.

Use 3.14 for π .
 Volume _____
 (unit)

Practice

7. 0.95 m = _____ cm

8. 378 mm = _____ cm

9. 1.4 m = _____ mm