MAth on the Fly!

NAME: _____   DATE: _____
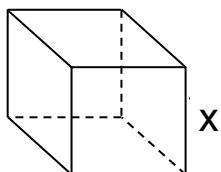
Finding Missing Dimensions of 3D Solids

Find the value of each variable in the figures below.
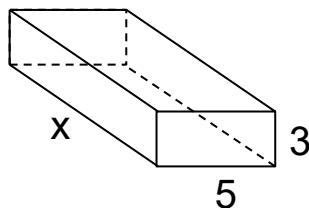
1.

Cube
Volume = 343 cm³

x

2.

Rectangular Prism
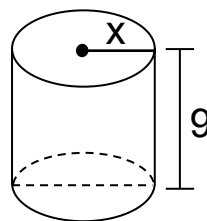Volume = 135 ft³

x   3
5

3.

Cylinder
Volume = 144π km³

x
9

4.

Rectangular Prism
Volume = 280 in³

x
5
7
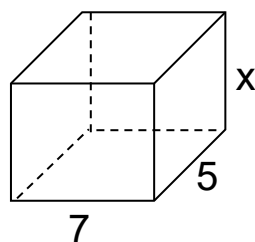
5.

Cylinder
Volume = 288π yd³

x
12
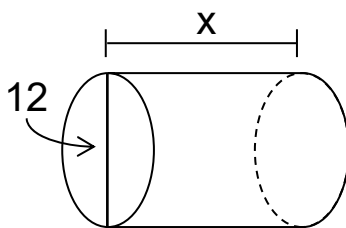
6.

Cube
Volume = 729 mm³

x
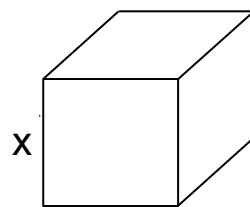
7.

Cylinder
Volume = 150π cm³

6
x
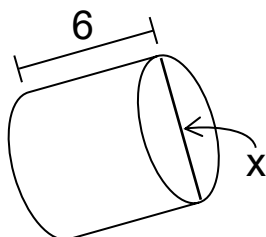
8.

Rectangular Prism
Volume = 56 ft³

x
14
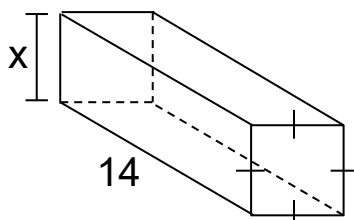
9.

Triangular Prism
Volume = 168 km³

4
x   12
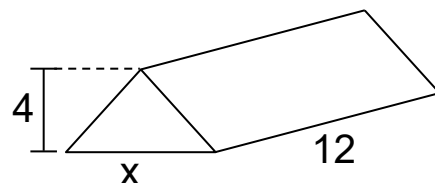
SOLUTIONS

1.   x = 7 cm

2.   x = 9 ft

3.   x = 4 km

4.   x = 8 in

5.   x = 8 yd

6.   x = 9 mm

7.   x = 10 cm   (radius = 5)

8.   x = 2 ft

9.   x = 7 km