Geometry Honors: Target 12.3a   Volume of Prisms and Cylinders   Name_____

In what type of units is the volume measured?
1.

_____

2. How many 3 inch cubes can fit completely in a box that is 15 inches long, 9 inches wide, and 3 inches tall?
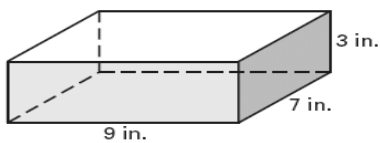
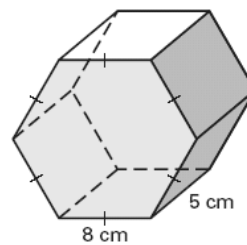   **A) 15**   **B) 45**   **C) 135**   **D) 405**
_____

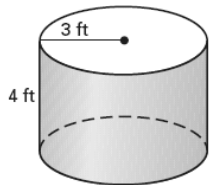**Find the volume of the right prism or right cylinder. Round your answer to two decimal places.**

3.

3 in.

7 in.

9 in.
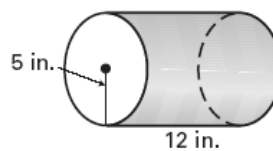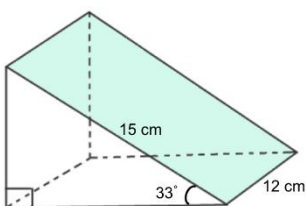
Base is_____

$B_A =$_____

$h =$ _____

$V =$ _____

4.

5 cm

8 cm

Base is_____

$B_A =$_____

$h =$ _____

$V =$ _____

5.

3 ft

4 ft

Base is_____

$B_A =$_____

$h =$ _____

$V =$ _____

6.

5 in.

12 in.

Base is_____

$B_A =$_____

$h =$ _____

$V =$ _____

7.

15 cm

33°

12 cm

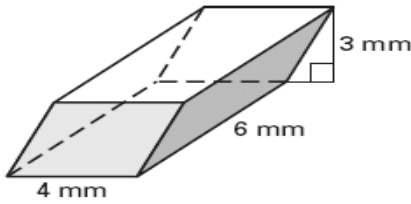Base is_____

$B_A =$_____

$h =$ _____

$V =$ _____

8.   The bases of a right prism are rhombi with one diagonal 18 inches long and the side lengths are 41 inches. The height of the prism is 8 inches. Find the volume of the prism.
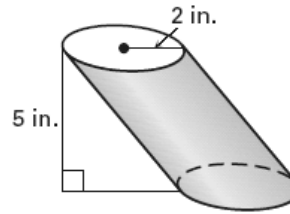
Use Cavalieri's Principle to find the volume of the oblique prism or cylinder. Round your answer to two decimal places.
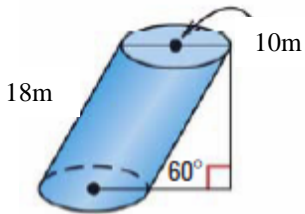
9.

3 mm

6 mm
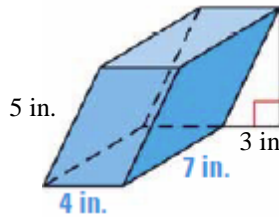
4 mm

Base is_____

$B_A =$_____

$h =$ _____

$V =$ _____

10.

2 in.

5 in.

Base is_____

$B_A =$_____

$h =$ _____

$V =$ _____

11.

10m

18m

60°

Base is_____

$B_A =$_____

$h =$ _____

$V =$ _____

12.

5 in.

3 in.

7 in.

4 in.
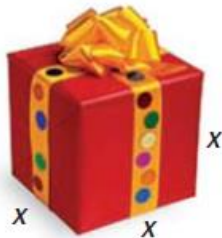
Base is_____

$B_A =$_____

$h =$ _____

$V =$ _____

Prisms and Cylinders

13. $V = 1000$ in.^{3}

x

x

x

14.

$V = 128\pi$ in.^{3}

8 in.

r