



Name KEY Date _____

Practice: For use after Lesson 12.3, Geometry

$$L = 2\pi rh$$

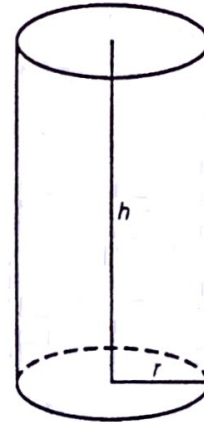
$$T = 2\pi rh + 2\pi r^2$$

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

Cylinders

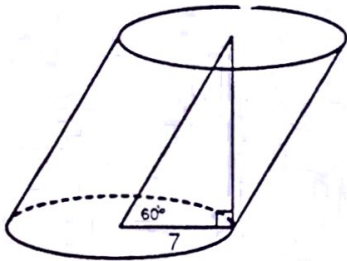
Complete the table for a right circular cylinder.

	Units		Square Units		Cubic Units
	h	r	L	T	V
1.	8	5	80π	130π	200π
2.	4	8	64π	192π	256π
3.	<u>7</u>	12	168π	456π	1008π
4.	<u>10</u>	6	120π	192π	360π
5.	<u>9</u>	4	72π	104π	144π



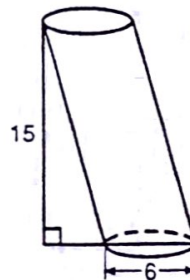
Find the volume of each oblique cylinder.

6.



$343\sqrt{3}\pi$

7.



135π

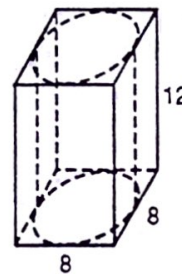
This cylinder is inscribed in a rectangular solid of dimensions $l = 8$ in., $w = 8$ in., and $h = 12$ in.

8. Find the total area and volume of the cylinder.

$128\pi, 192\pi$

9. Find the volume of the region between the cylinder and the prism.

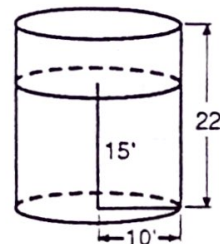
Use 3.14 for π . 165.12 in^3



Application

10. **Water management** This cylindrical tank has 15' of water in it. To the nearest whole percent, how much of the tank is filled?

68%



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