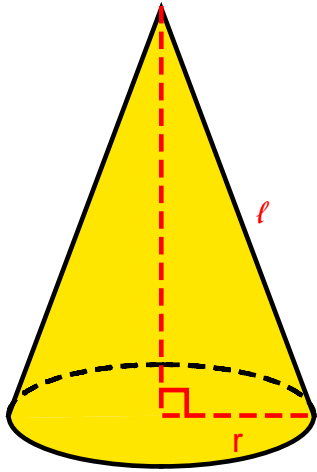


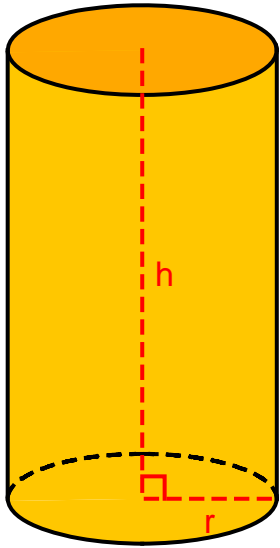
## Worksheet 10.2: Cylinders and Cones

Complete the tables for the cone shown below.



	$r$	$h$	$l$	L.A.	T.A.	V
1.	6	8				
2.	5	12				
3.	3		5			

Complete the table for the cylinder shown below.



	r	h	L.A.	T.A.	V
4.	6	8			
6.	5		$40\pi$		
7.		8			$800\pi$

Find the lateral area, total area, and volume of each cylinder described below.

8.  $r = 8, h = 12$

9.  $r = 12, h = 8$

10.  $r = 4, h = 3$

11.  $r = 13, h = 11$

12. The volume of a cylinder is  $125\pi$ . If  $r = h$ , find  $r$ .

13. The lateral area of a cylinder is  $96\pi$ . If  $h = 6$ , find  $r$ .

14. The total area of a cylinder is  $40\pi$ . If  $h = 8$ , find  $r$ .

Find the lateral area, total area, and volume for the cone described below.

15.  $h = 6, r = 3.$

16.  $h = 12, r = 5$

17.  $\ell = 17, h = 8$

18.  $\ell = 12, r = 4$

19. Water is pouring into a conical reservoir at the rate of  $2 \text{ m}^3$  per minute. If the diameter of the reservoir is 10cm and the slant height is 17 m, approximately how long will it take to fill the reservoir?