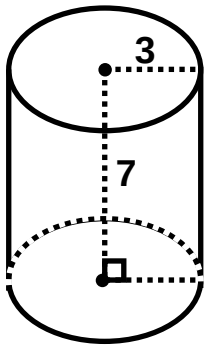
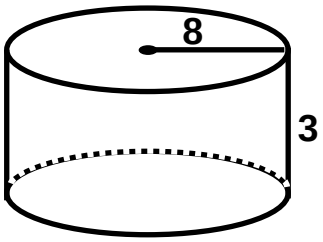
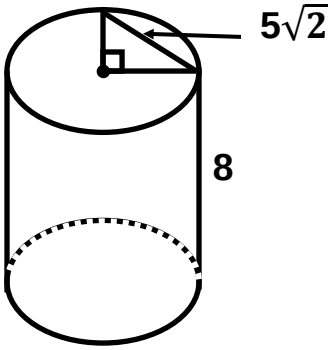
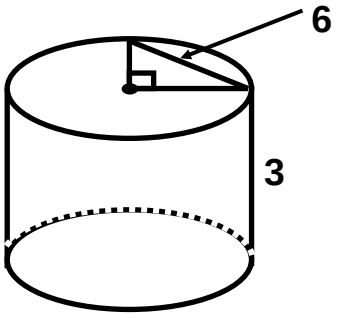
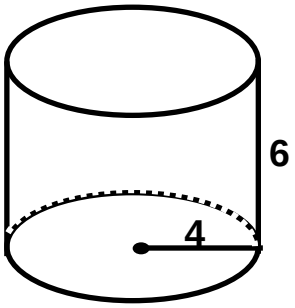
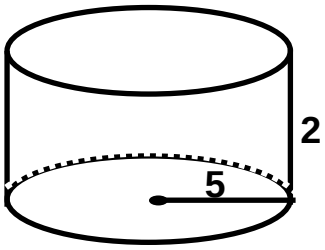
NAME_____**DATE**_____**PER.**___

SURFACE AREA & VOLUME OF CYLINDERS

Find the indicated value(s) for each of the following. In problems 1 – 11, even numbered problems should be rounded to the nearest tenth if necessary.

1. LA = _____ TA = _____ V = _____	
2. LA = _____ TA = _____ V = _____	
3. LA = _____ TA = _____ V = _____	
4. LA = _____ TA = _____ V = _____	
5. LA = _____ TA = _____ V = _____	

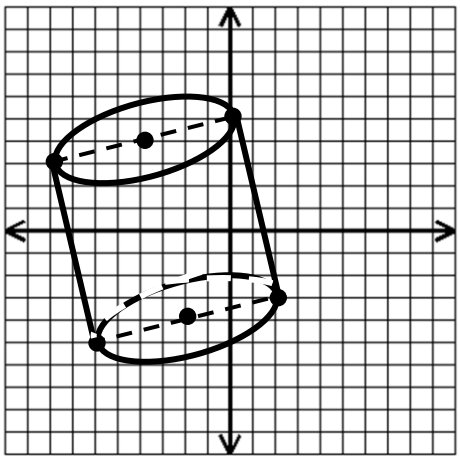
6. LA = _____ TA = _____ V = _____	
7. V = _____	A cylinder has a radius of 2 in. and a height of 5 in. Find its volume.
8. TA = _____	A cylinder's radius and height are both 4 cm. Find its total area.
9. LA = _____	The volume of a cylinder is 63π in^3 and its radius is 3 in. Find its lateral area.
10. TA = _____	A cylinder has a radius of 5 cm and a height of 9 cm. Find its Total Area.
11. LA = _____	The volume of a cylinder is 36π cubic units and its height is 4 units. Find its Lateral Area.
12. h = _____	Find the height of a cylinder with a volume of 150π cubic units, and a radius of 5 units.

13. h = _____	Find the height of a cylinder with a lateral area of 100π square units, and a radius of 5 units.

Determine which cylinder would have the greater measure.

14. Volume: _____ Lateral Area: _____	Cylinder A has a radius of 4 units and a height of 6. Cylinder B has a radius of 6 units and a height of 4.

Use the cylinder graphed below to answer the questions.



15. _____	Find the EXACT Lateral Area.
16. _____	Find the Total Area. Round your answer to the nearest tenth.

17. _____	Find the equation of the line containing the radius through the center located in the third quadrant.
18. _____	Find the equation of the line containing the height going through the center of the bases.

REVIEW PROBLEMS
Answer each problem as indicated.

19. _____	The hypotenuse of an isosceles right triangle is 6. What is its area?
20. _____	Write the equation of the line perpendicular to ***2x + 3y = 8*** and passing through the point ***(0, -4)***.
21. _____	Four angles of a pentagon measure 30°, 73°, 150°, and 112°. What is the measure of the fifth angle?
22. YES or NO Classification: _____	Can these lengths be lengths of a triangle? If so, classify it by angles. ***10 in, 24 in, 26 in***
23. _____	Determine the missing side in a right triangle with given lengths: ***Legs: 6 cm, 8 cm***
24. _____	In kite UVWX with diagonals $\overline{UW}$ and $\overline{XV}$, $\overline{UV} \cong \overline{UX}$ and $\overline{VW} \cong \overline{XW}$. If m∠XUV = 84° and m∠WVX = 68°, what is m∠VWX?