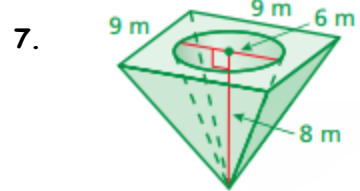
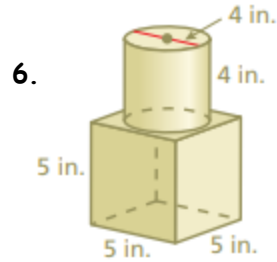
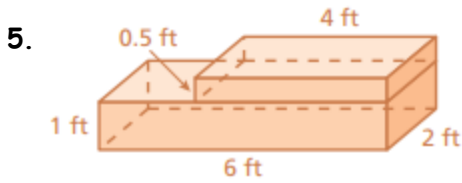
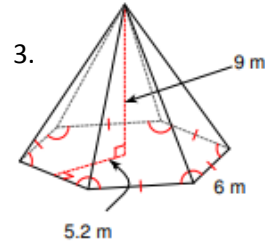
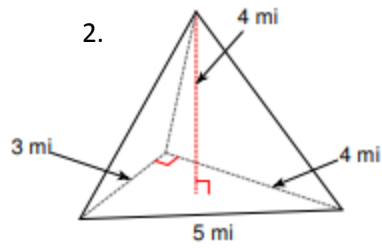
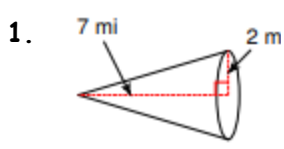


Find the volume of the figure shown. Write the formula and show all work.



8. Write the equation of the circle. Name the radius and the center of the circle.

$$x^2 + y^2 - 12x + 24y - 1 = 0$$

9. Find the equation of a line parallel to the line $y=3x-5$ and containing the point $(1, -3)$.

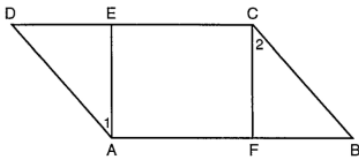
11. If the population of a city is 5,500 and the city is shaped like a circle with a radius of 10 miles, find the population density of the city.

12. The spider looks down at the spider web in the doorway at an angle of depression of 20 degrees.. If the door is 8 feet tall, how far is the spider from the web? DRAW A PICTURE, LABEL IT, and SOLVE.

13. Write $\cos 62$ in terms of sine. 14. Write $\sin 80$ in terms of cosine. 15. Convert 250 to radians.

16. Given: $\square ABCD$
 $\overline{DE} \cong \overline{FB}$

Prove: a) $\triangle DEA \cong \triangle BFC$
 b) $\angle 1 \cong \angle 2$



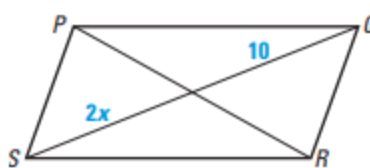
STATEMENT	REASONS
1. Parallelogram ABCD	1. Given
2. $\overline{AD} \cong \underline{\hspace{1cm}}$	2.
3. $\angle D \cong \underline{\hspace{1cm}}$	3.
4. $\overline{DE} \cong \overline{FB}$	4. Given
5.	5.
6.	6.

17. Find x.

$KLMN$ is a rectangle.



$PQRS$ is a parallelogram.



$CDEF$ is a rectangle.

