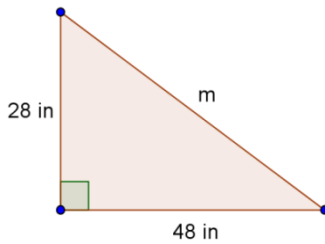


NAME: _____ PERIOD: _____ DATE: _____

- In a 30-60 right triangle, if the shorter leg has length p , then the longer leg has length _____ and the hypotenuse has length _____.
- The _____ are the two sides in a right triangle that are not opposite the right angle.
- In an isosceles right triangle, if the hypotenuse has length $3\sqrt{2}$, then each leg has length _____.
- In a right triangle, if r and s are the lengths of the legs and t is the length of the hypotenuse, then _____.

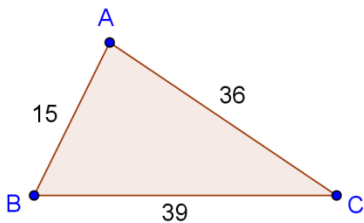
5. Find m .

$m =$ _____



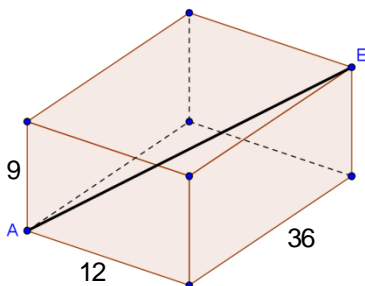
6. Is $\triangle ABC$ a right triangle? Why?

Yes/No? _____



7. Find $m\overline{AE}$ (in cm).

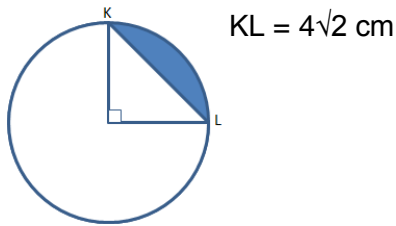
$AE =$ _____



SHOW ALL WORK!

8. Find the shaded area.

Area = _____



9. Determine whether $\triangle ABC$ with vertices $A(3,2)$, $B(3,5)$, and $C(6,2)$ is scalene, isosceles, isosceles right, or equilateral.

10. If the area of a square is 81 cm^2 , what is the length of the diagonal?

11. Two sports cars leave the city at 9am. One heads due south at 60 mph, the other travels east at 90 mph. How far apart are they at noon?

12. Find the area of an equilateral triangle with sides measuring 12 feet.

13. What is the length of the hypotenuse of a 30-60 right triangle with a longer leg of length $13\sqrt{3} \text{ m}$?

14. Find the area of an equilateral triangle circumscribed about a circle with an area of $64\pi \text{ in}^2$ (the triangle is on the outside of the circle)

15. Find the length of \overline{AB} .

Length AB = _____

