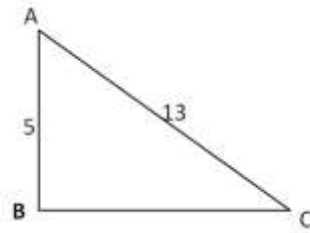


Sin = _____

Cos = _____

Tan = _____

Use the triangle to the right for questions 1-5.

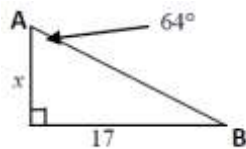


1. \overline{BC} =
2. $\tan C$ =
3. $\sin A$ =
4. Find $m\angle A$
5. Find $m\angle C$

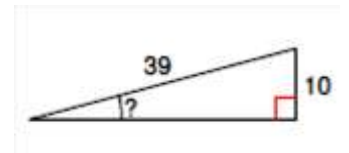
6. In $\triangle ABC$, where $\angle ACB = 90^\circ$, $\sin A = \frac{4}{5}$. Find $\cos A$. Draw a diagram.

Find the missing side or angle in the following triangles

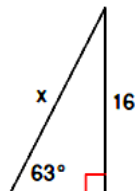
7.



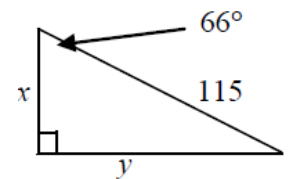
8.



9.



10.



11. The top of a waterslide is 14 ft above the ground. The angle of depression from the top of the water slide to the ground is 22° . How long is the slide?

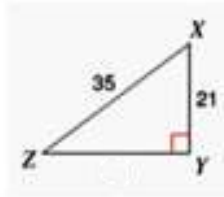
12. A pole casts a shadow that is 14 ft long. The angle of elevation is 45° . What is the length of the pole?

13. The shorter leg of a 30-60-90 triangle is 7.4 meters long. Find the triangle's perimeter.

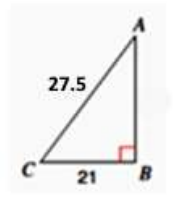
14. A forest ranger is on a fire lookout tower in a national forest. His observation post is 214 ft above the ground. He spots a fire. The angle of depression from his line of sight to the fire is 12° . How far away is the fire from the lookout tower in terms of line of sight?



15. Find angles X and Z.

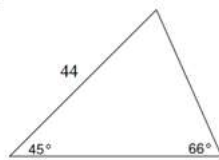


16. Find angles A and C.

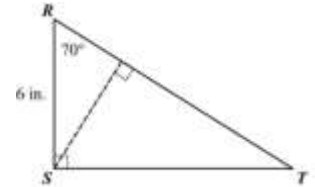


Find the area of each triangle

- 17.

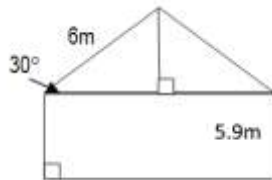


- 18.

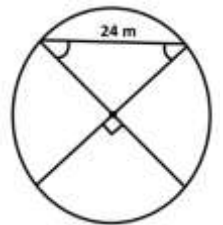


For questions 19 - 22, leave your answer in simplest radical form.

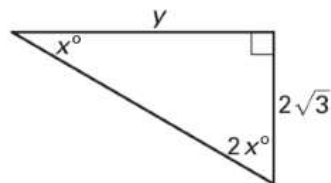
19. What is the height of the house?



20. What is the area of the circle?



- 21.



22. The figure below is a parallelogram which has an area of $b \times h$. Find its area.

