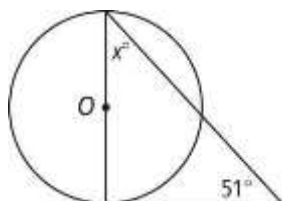


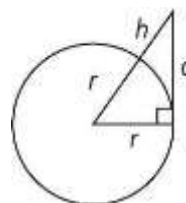
HW-48 Tangent Lines

Assume that lines that appear to be tangent are tangent. O is the center of each circle. What is the value of x ?

1.

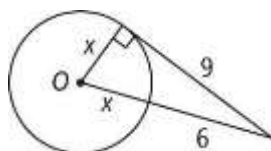


The circle at the right represents Earth. The radius of the Earth is about 6400 km. Find the distance d that a person can see on a clear day from each of the following heights h above Earth. Round your answer to the nearest tenth of a kilometer.



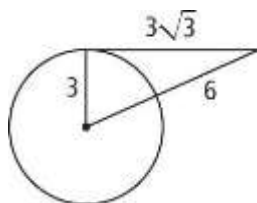
In each circle, what is the value of x to the nearest tenth?

2.



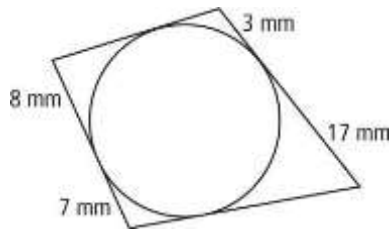
Determine whether a tangent line is shown in each diagram. Explain.

3.

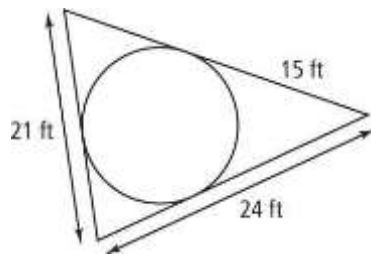


Each polygon circumscribes a circle. What is the perimeter of each polygon?

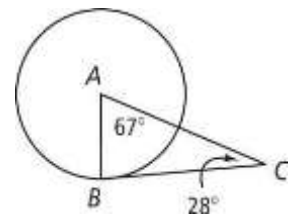
5.



6.



7. The peak of Mt. Everest is about 8850 m above sea level. About how many kilometers is it from the peak of Mt. Everest to the horizon if the Earth's radius is about 6400 km? Draw a diagram to help you solve the problem.



8. The design of the banner at the right includes a circle with a 12-in. diameter. Using the measurements given in the diagram, explain whether the lines shown are tangents to the circle.

