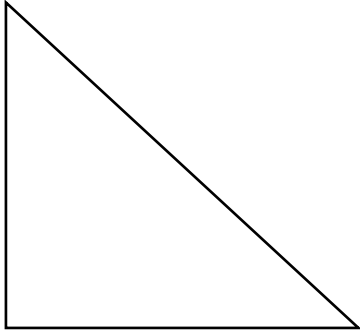


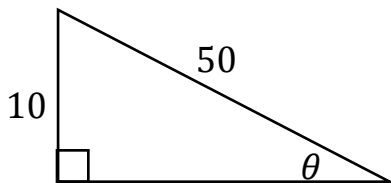
Lesson 6.4: Inverse Trigonometric Functions & Right Triangles

Solving for Angles in Right Triangles



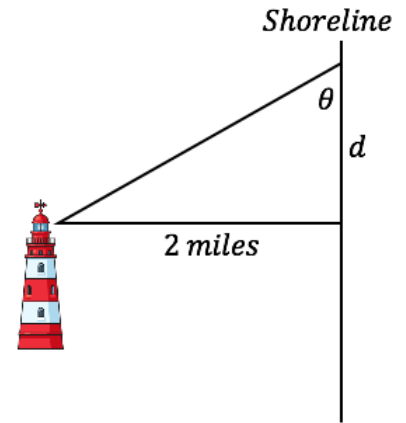
Examples:

1. Find the measure of angle θ in the diagram below.



2. A 40 ft. ladder leans against a building. If the base of the ladder is 6 ft. from the base of the building, what is the angle formed by the ladder and the building?

3. A lighthouse is located on an island that is 2 miles off a straight shoreline. Express the angle formed by the beam of light and the shoreline in terms of the distance d in the figure below.



4. Find all the angles θ between 0° and 180° satisfying the given equations:

a. $\sin(\theta) = 0.4$

b. $\cos(\theta) = 0.4$