

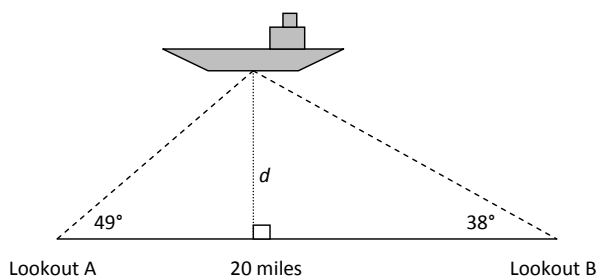
1.5 Modeling with Triangles

Name _____

1) Mary is sailing across a lake from Marker A to Marker B which are 4 miles apart. After sailing 1.8 miles she realizes she is 6° off-course. To the nearest tenth of a mile, how far from Marker B is she when she realizes her error?



2) Triangulation can be used to find the location of an object by measuring the angles to the object from two points at the end of a baseline. Two lookouts 20 miles apart on the coast spot a ship at sea. Using the figure below find the distance, d , the ship is from shore to the nearest tenth of a mile.



3) A navigator plots the course a plane is currently traveling. The plane is 300 miles from its destination. If it continues on its current course it will travel 325 miles and end up 125 miles due south of its destination. To the nearest degree, how many degrees is the plane off course?

4) Find the height of the building in the figure below to the nearest foot.

