

23. A pole is braced by two wires that extend from the top of the pole to the ground. The lengths of the wires are 16 feet and 18 feet and the measure of the angle between the wires is 110° . Find, to the nearest foot, the distance between the points at which the wires are fastened to the ground.
24. Two points A and B are on the shoreline of Lake George. A surveyor is located at a third point C some distance from both points. The distance from A to C is 180.0 meters and the distance from B to C is 120.0 meters. The surveyor determines that the measure of $\angle ACB$ is 56.3° . To the nearest tenth of a meter, what is the distance from A to B ?
25. Two sailboats leave a dock at the same time sailing on courses that form an angle of 112° with each other. If one boat sails at 10.0 knots per hour and the other sails at 12.0 knots per hour, how many nautical miles apart are the boats after two hours? (nautical miles = knots \times time) Round to the nearest tenth.

