

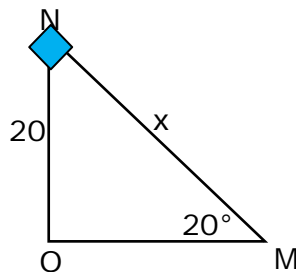
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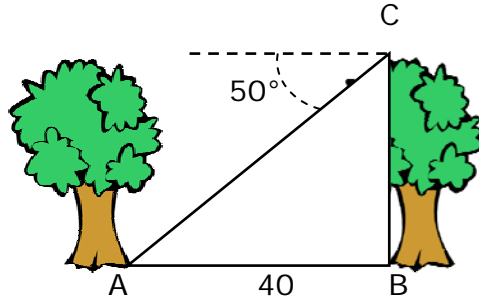
Trigonometric Ratios and the Pythagorean Theorem - Guided Lesson:

Complete the following problems:

1) Katie is flying a kite. The string of the kite makes an angle of 20° from the ground. If the height of the kite is $h = 20$ m, find the length (in meters) of the string that Katie is using.



2) Two trees face each other separated by a distance of 40 meters. As seen from the top of the second tree, the angle of depression to the first tree's base is 50° . Find the height of the second tree in meters.



3) A 15 inch long ladder is leaning against a wall; at the point X. Point Y is a bottom of ladder, which makes a 32° angle. Find the distance of a wall from the bottom of the ladder.

