

Name _____ Date _____

TRIG WORD PROBLEMS

Draw diagrams for each word problem and show the trig function used to solve the problem!

A 40 foot ladder which is leaning against a wall reaches the wall at a point 36 feet from the ground. Find the angle that the ladder makes with the ground.

Find the angle of elevation of the sun when a 24 foot tree casts a shadow of 36 feet.

A television tower is 150 feet high and an observer is 120 feet from the base of the tower. Find the angle of elevation to the top of the tower from the place where the observer is standing.

A boy flying a kite lets out 150 feet of string that makes an angle of 64° with the ground. If the string forms a straight line, how high is the kite above the ground?

An airplane climbs at an angle of 11° with the ground. Find the distance it has traveled when it has attained an altitude of 400 feet.