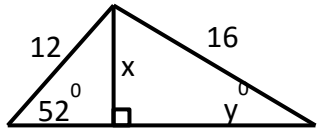
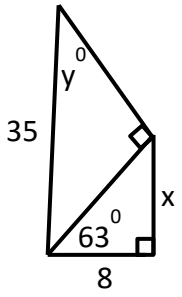
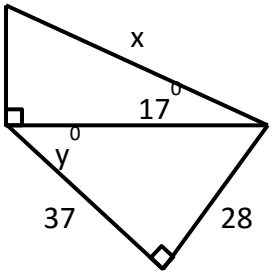
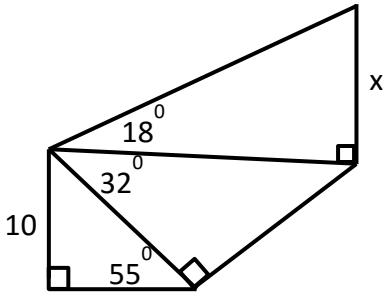
Name _____ Date _____

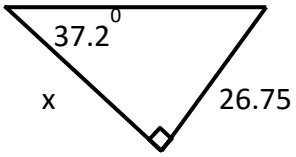
Use trigonometry to solve each problem. Remember all trigonometry calculations should be completed using a minimum of three decimal places. Round all <u>final</u> answers to the tenth if needed.

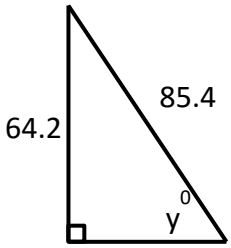


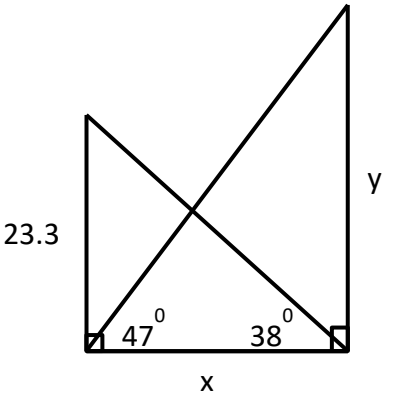
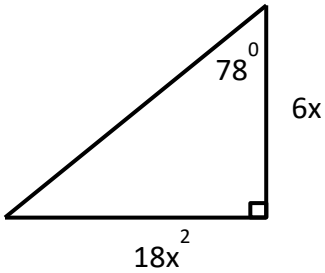
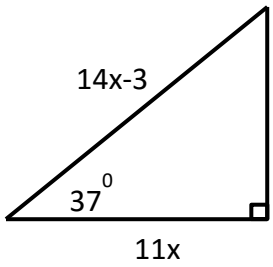










		
A 16 foot ladder is placed so that it makes an 80^0 angle with the ground. How far up the wall does it reach?	A kite is tied to a string that is pinned to the ground. The string is 60 feet long and makes a 60^0 with the ground. How high is the kite above the ground?	An airplane begins a 14^0 climb and flies for 2 ground miles. What is the change in the planes altitude?
A 60 foot tall tree, cast a 10 foot shadow. What is the angle at which the sunlight meets the ground? Approximately what time of day is it, 9am, 1pm, 6pm?	The escalator at the local mall is 130 feet long and rises on a 28^0 angle. How high is the second floor above the first floor?	When Mary looks out the window of the 3^{rd} floor at work, she can see her friend Jane in the building next door. The buildings are 60 feet apart and each floor is 15 feet tall. If Jane works on the 6^{th} floor, what is the angle of elevation (looking up from the horizontal) for Jane to see Mary?