

Applied Math 30S

Name _____

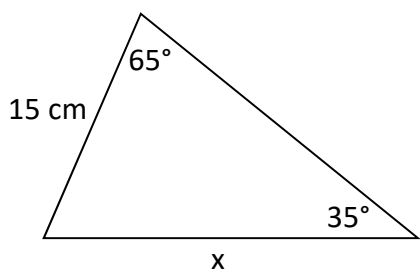
Trigonometry Hand-In Assignment 4

Law of Sines and Law of Cosines

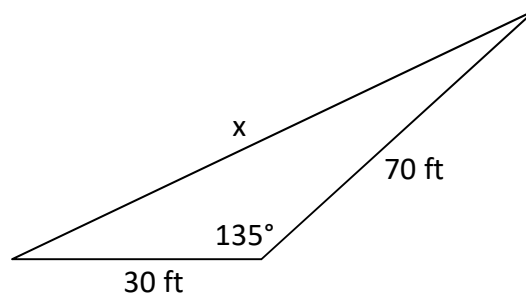
Complete each of the questions in the spaces provided. Show all work. Round off all answers to **two decimal places**. Hand in this assignment when finished.

1. Solve for the requested piece of information in each of the following triangles (x or θ):

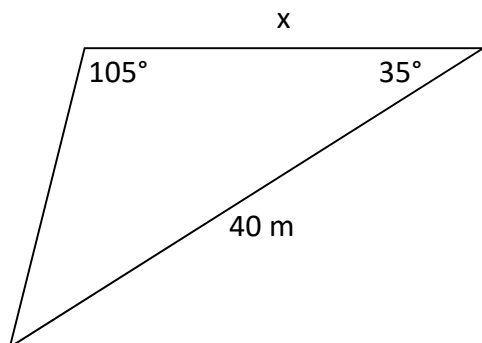
a)



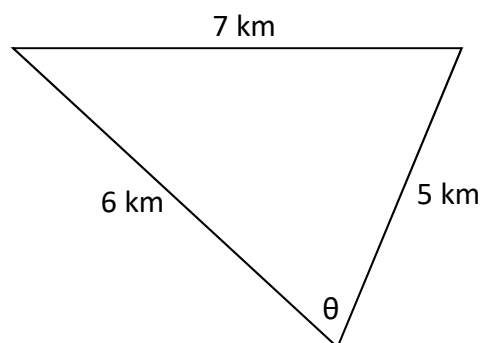
b)



c)

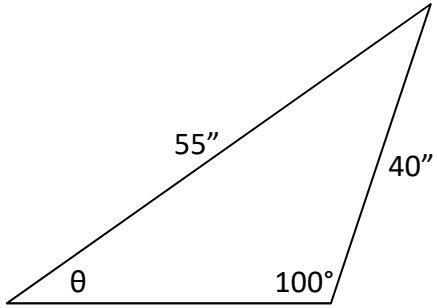


d)

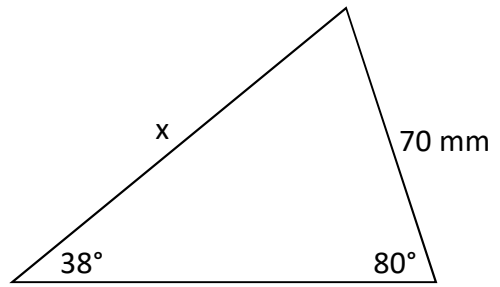


More on back →

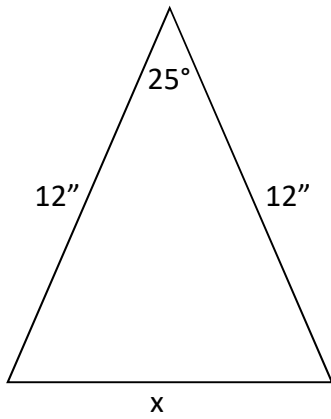
e)



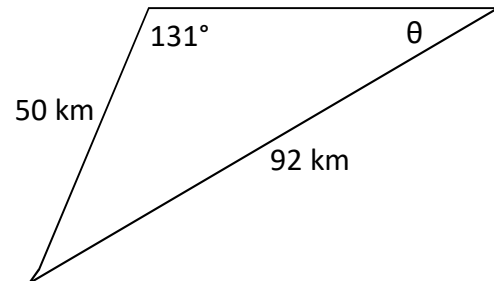
f)



g)



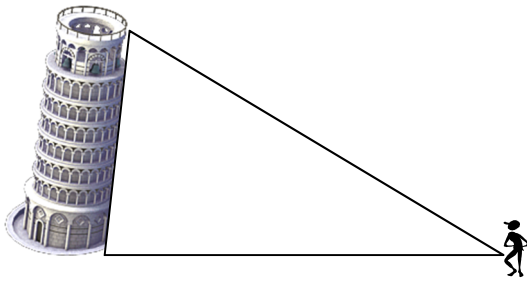
h)



2. A gardener creates a triangular garden for a client. The sides of the garden are 8 m, 12 m and 15 m long. He wants a custom decoration to be placed in the angle made by the two shorter sides. Find the size of this angle, in degrees.

3. Two people looked up in the sky and saw superman flying. Person A saw Superman at an angle of elevation of 65° and person B saw Superman at an angle of elevation of 80° . The two people are standing 30 feet from each other. Find the distance each person is from Superman.

4. The Leaning Tower of Pisa is 57 m tall and makes an angle of 84° with the ground. A person stands 100 m away from the base of the tower. How far are they from the top of the tower?



5. A chandelier is suspended from the ceiling by two chains. One chain is 46 cm long and forms a 60° angle with the ceiling. The other chain is 64 cm long. What angle does the longer chain make with the ceiling?

