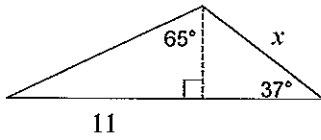


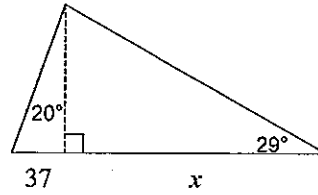
G4: B Level Test Review

Find the length of the side labeled x . Round your answer to the nearest hundredth.

1)

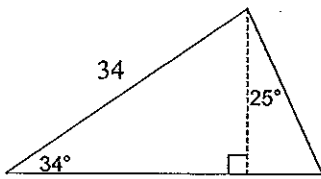


2)



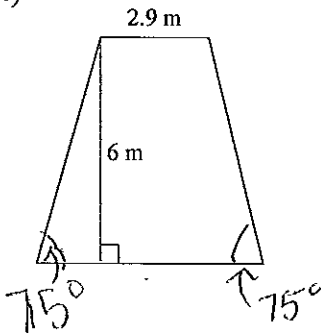
Find the area and perimeter of the triangle. Round your answers to the nearest hundredth.

3)

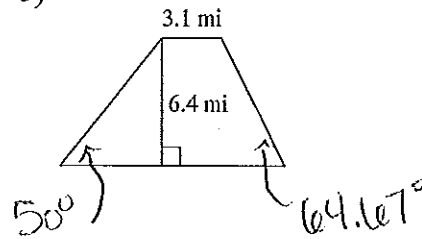


Find the area and perimeter of each.

4)



5)

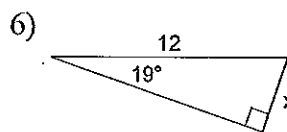
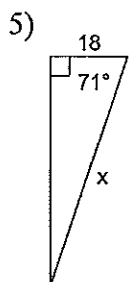
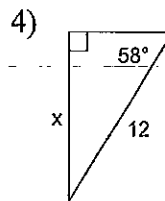
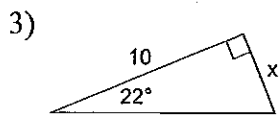
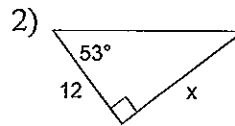
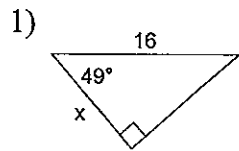


Draw a diagram and then solve the problem.

- 6) A ship travels east from Port Lincoln 24 miles before turning north. When the ship becomes disabled and radios for help, the rescue boat needs to know the fastest route to the ship. The rescue boat navigator finds that the shortest route from Port Lincoln is 48 miles long. At what angle off of due east should the rescue boat travel to take the shortest route to the ship?
- 7) A surveyor is standing 100 meters from a bridge. She determines that the angle of elevation to the top of the bridge is 35° . The surveyor's eye level is 1.45 meters above the ground. Find the height of the bridge..
- 8) Danica is in the observation area of the Sears Tower in Chicago overlooking Lake Michigan. She sights two sailboats going due east from the tower. The angles of depression to the two boats are 42 degrees and 29 degrees. If the observation deck is 1,353 feet high, how far apart are the boats?
- 9) An airplane rises vertically 1000 feet over a horizontal distance of 1 mile. What is the angle of elevation of the airplane's path? (hint: there are 5,280 feet in a mile)

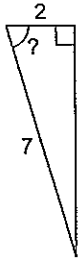
G4: Trigonometry Review C - Level

Find the missing side. Round to the nearest thousandth.

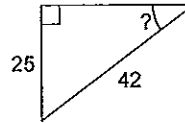


Find the measure of the indicated angle to the nearest degree.

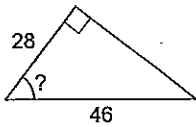
7)



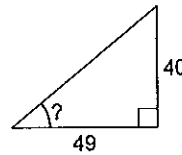
8)



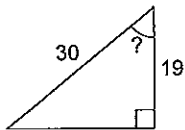
9)



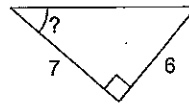
10)



11)



12)



Draw a diagram to help solve this problem. Your diagram should be of a right triangle. Round your answer to the nearest thousandth.

13) The angle of elevation from a ship, at sea level, to the top of a 230-foot lighthouse is 3° . What is the horizontal distance from the ship to the lighthouse?

14) Damon is locked out of his house. The only open window is on the second floor, which is 12 feet above the ground. He needs to borrow a ladder from his neighbor. Mrs. Thompson has a 13 foot ladder. How far from the house (horizontal distance) should he place the ladder?