## **Working with Right Triangles - Guided Lesson:**

Complete the following problems:

1) In a right triangle opposite side is 12 and the hypotenuse is 9. Find the value of normal base?



2) A tree is 50 feet in height and casts a shadow that is 25 feet in. What is the angle of elevation from the end of the shadow to the top of the tree with respect to the ground? This is all assuming that the tree is 100% straight.

3) Bob is building a new home. He needs to erect a wall that previously was not in the plans. A square section of the housing wall requires diagonal bracing. If the wall is 6.5 meters, how long must the brace be?