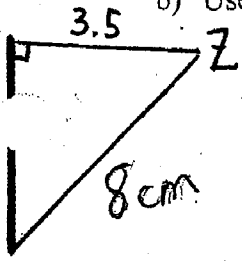


b) Use trigonometry to solve for the  $\angle Z$  in the diagram below. Round to the nearest degree.



15. A kite has a string 150m long. The string makes an angle of  $40^\circ$  with the ground. Determine the height of the kite. (Include a diagram in your answer.)

16. A 12m ladder leans against a vertical wall. The ladder makes an angle of  $64^\circ$  with the level ground.

a) Draw a labelled diagram of this situation.

b) Calculate the distance from the foot of the ladder to the base of the vertical wall.

c) Calculate how high up the wall the ladder reaches.