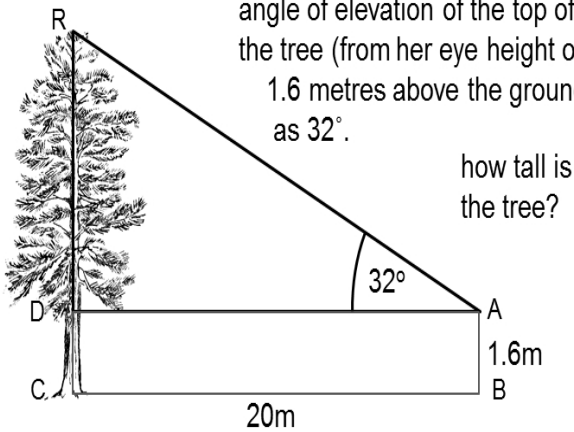


Phoebe stands on level ground, at B, 20 metres away from the foot C of a tree (CDR)

she whips out her handy pocket clinometer and measures the angle of elevation of the top of the tree (from her eye height of 1.6 metres above the ground) as 32° .

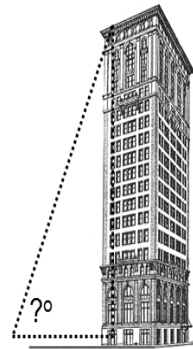


how tall is the tree?

Phoebe still stands on level ground, a distance away from the foot of a building known to be 174.6m high

what will the angle of elevation be from a distance of:

- (a) 50 metres away
- (b) 100metres away ?



Phoebe drops her pocket clinometer off the top of the leaning tower of Pisa

it falls to the ground, 3m from the base of the tower

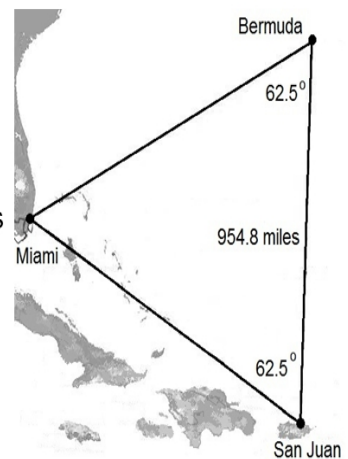
the tower was then leaning at an angle of 87.1° to the ground.

how far did it fall?

the 'Bermuda triangle' (not recognised in any official way) is claimed to be 500,000 square miles in area

it is an isosceles triangle with base angles as shown

how far out is the area claim?



triangle joining Miami, San Juan in Puerto Rico and Hamilton, Bermuda