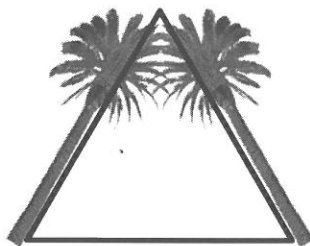


Equilateral Triangle Example 1

Two palm trees become unrooted from the sand on a beach and start to fall. They stop falling because their tops touch: Now the trees make an *equilateral triangle* with each tree and the ground forming a side of the triangle (pictured below).



- a) State the size of the angle that each tree forms with the ground.

Since the trees form an equilateral triangle, the angles have to be 60° , by definition.

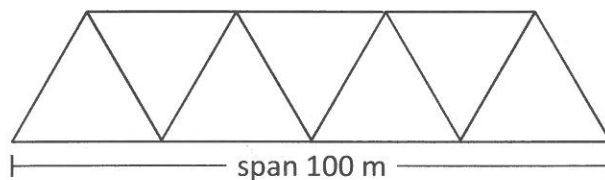
- b) If there is 30 m between the base of each tree, how tall are the trees?

All the sides of an equilateral triangle are of equal length, so both trees must also be 30 m in height.

Equilateral Triangle Example 2

OLD EXAM QUESTION ALERT!!! This question comes from the January 2017 Provincial Exam.

A student is solving a math question involving a 100 metre truss bridge. The bridge is made of 7 equilateral triangles as shown in the diagram below.



Sketch 1 of the bridge's triangles and state all side and angle measurements.

Side length for one triangle: $100 \div 4 = 25 \text{ m}$

