# Problem of the Week 

## Problem B

"Try"angles
Using four straight lines, it is only possible to construct up to two non-overlapping triangles. Here are some examples:


Using five straight lines, it is only possible to construct up to five non-overlapping triangles. Here are some examples:


Notice that the first diagram has four non-overlapping triangles and the second diagram has five non-overlapping triangles. Notice also that the diagram with five non-overlapping triangles also has a pentagon which is not counted.
(a) How many non-overlapping triangles can you make using six straight lines?
(b) How many non-overlapping triangles can you make using seven straight lines?

Trade ideas with a classmate.

