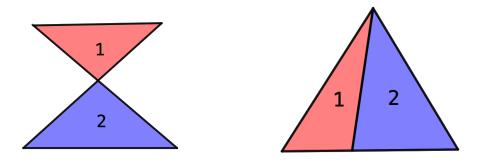
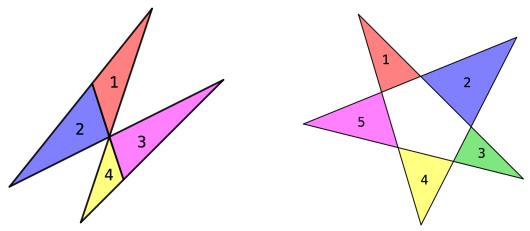
Problem of the Week Problem B "Try"angles

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.

THEME GEOMETRY & MEASUREMENT