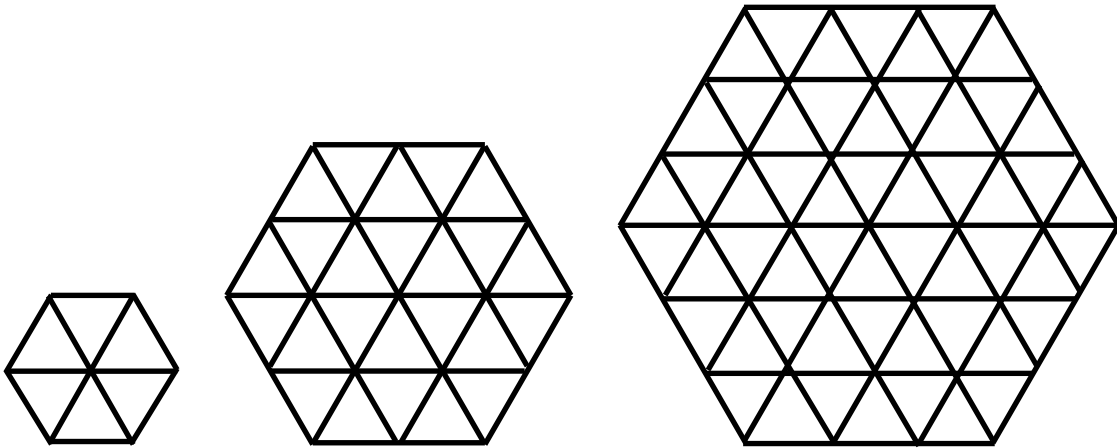


## HOMEWORK #2

ASSIGNED: SEPT 19, 2017; DUE: OCT 11, 2017

The figures below are line drawings made up of intersecting segments which are enclosing regions. The first figure has 6 regions and 12 segments, the second figure has 24 regions and 42 segments, the third figure has 54 regions and 90 segments. Say this sequence of figures continues so that there are  $n$  segments on a side. How many segments and regions are there?



Can you generalize your results to other sequences of shapes?