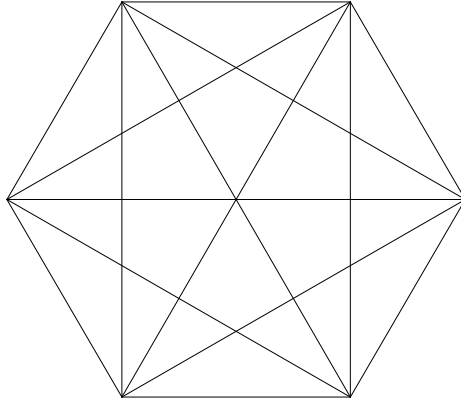
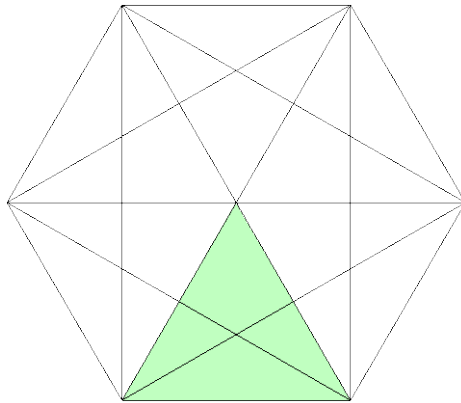


# HEXAGON CONNECTIONS

Consider a hexagon in which every corner is joined by a straight line to every other corner.



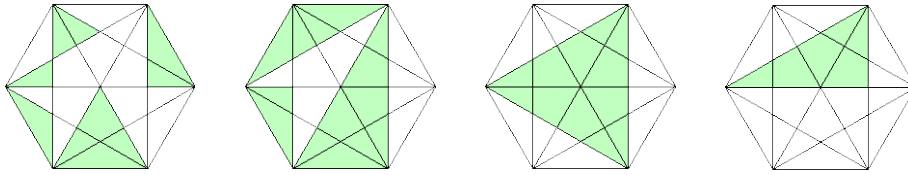
1. If you are permitted to only shade regions between the lines in such a diagram, how many different triangles could you shade in? Use the large hexagon on Geo-Pro to draw as many different ones as you can. One possible triangle is shown below.



2. Investigate the possible quadrilaterals that may be shaded in between the lines.

**Answers**  
**HEXAGON CONNECTIONS**

1. 10 possible triangles:



2. 15 possible quadrilaterals:

