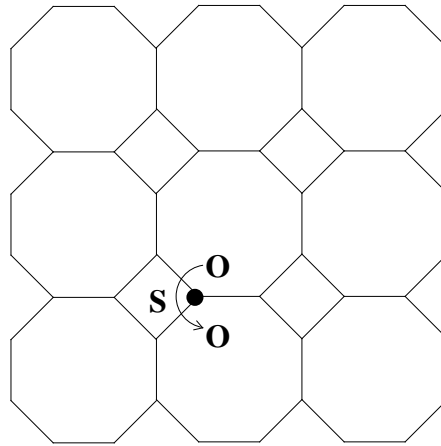# TESSELLATION CODES

A tessellation is a tiling of shapes with no gaps and no overlapping. A tessellation made of only regular octagons and squares is shown below.

Consider the point marked with a black dot above. The shapes that meet there (in anti-clockwise order) are:
Octagon, **S**quare, **O**ctagon. A shorthand code for this could be **OSO**.
If you look at any other point inside the tessellation where shapes meet, you'll notice that the same arrangement of shapes is present (i.e. OSO). Tessellations of regular polygons where this is true are called semi-regular tessellations.

Such codes (if known or given) can be used to build up semi-regular tessellations from scratch. You just need to repeat the code at every interior point where shapes meet to produce a larger tessellation!
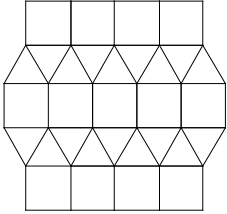
Using the 1 cm polygons on Geo-Pro, try to produce large tessellations based on each of the codes below.

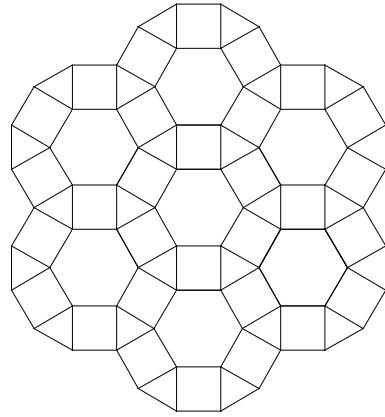| Key:	T = Triangle	S = Square	P = Pentagon	H = Hexagon
	O = Octagon	D = Dodecagon		

1.   TTTSS

2.   HSTS

3.   HTHT

4.   DDT

5.   DSH

6.   TTSTS

Answers
TESSELLATION CODES

1.

2.

3.

4.

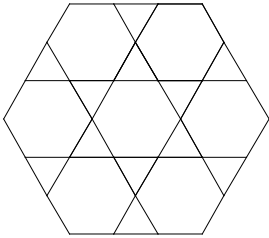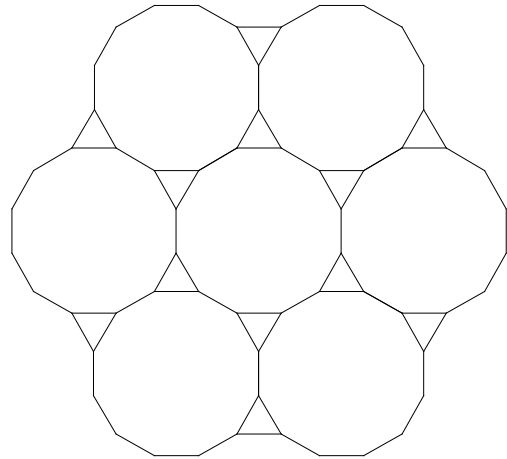5.

6.