

MATH 113

Recreational Concepts Subject to Examination

- Symmetry – Reflectional, Rotational (Centre, Angle, Order of Rotation)
- Sum of the Angle Measures in a Triangle and a Quadrilateral
- Formula for the Angle Measure in a Regular Polygon
- The Regular Tessellations (why are there only three?)
- Tessellation of a Scalene Quadrilateral (how and why does it tessellate?)
- Space Filling Around a Point: 21 Cyclic Arrangements of Regular Polygons (confirm)
- The Semiregular Tessellations (number names)
- The Regular Polyhedra (names / why are there only five?)
- F/C/E in the Regular Polyhedra
- Euler's Formula
- Duality between Regular Polyhedra
- The Semi-Regular Polyhedra (number names)
- F/C/E in the Semi-Regular Polyhedra (deductive approach)
- Topological Equivalence
- Perspective in Art
- Jordan Curve Mazes (inside/outside rule)
- Network Traversability (based on the degrees of the vertices)