

## Navigating Mātauranga Māori in Geometry

Translation reflection and rotation (Cultural Art)	You have identified and used the basic properties of translation, reflection and rotation	You have identified and used properties of translation reflection and rotation	You have identified and used more complex properties of translation, reflection and rotation	You have created original cultural artwork or designs using translation, reflection and rotation
Parallel lines and angle properties (EP Task)	You have not identified parallel lines, defined angle properties, or applied these concepts to solve problems	You have an understanding of the basic concepts of parallel lines and angle properties, but have some gaps in your knowledge	You have a strong understanding of the basic concepts of parallel lines and angle properties	You have displayed a deep understanding of parallel lines and angle properties, and have applied these concepts
Time management	You have not submitted the assessment	You have not submitted the assessment on time	You have submitted the assessment on time	You have submitted the assessment on time
Overall	WORKING TOWARDS curriculum expectation	Working AT curriculum expectation	Working ABOVE curriculum expectation	Working BEYOND curriculum expectation

Task Description

Targeted achievement objectives

**GM5-5** Deduce the angle properties of intersecting and parallel lines and the angle properties of polygons and apply these properties

**GM5-9** Define and use transformations and describe the invariant properties of figures and objects under these transformations.

Task Description for Navigating Mātauranga Maori in geometry

Create a Maori/ Pasifika design using your your own ideas

- The design should use colours that are associated with Pacifica and Maori cultures. For example, Pacifica cultures often use bright, vibrant colours, while Maori cultures often use earth tones.
- The design should use shapes that are associated with Pacifica and Maori cultures. For example, Pacifica cultures often use geometric shapes, while Maori cultures often use organic shapes.
- The design should use symbols that are associated with Pacifica and Maori cultures. For example, Pacifica cultures often use the sun, moon, and stars, while Maori cultures often use the koru, a spiral shape.
- Technical Skill:

The linework should be smooth and confident.

The shading should be evenly applied and create a sense of depth.

• Creativity:

The design should be original and not a copy of an existing design.

The design should be visually appealing and engaging.

Use the following skills

- Translation: The distance between any two points in a figure does not change under a translation.
- Rotation: The angle between any two lines in a figure does not change under a rotation.
- Reflection: The orientation of a figure does not change under a reflection.
- Parallel lines and angle properties
   (EP Task) You will be tested on EP test