

Lesson 9 – Investigation 2

Note: this question isn't self-marking... you'll need to get your teacher to review what you've done.

MathsNZ has designed a logo. They want to paint the logo on the wall outside the company office (they wish they had one of them) and have enough paint for 0.7 m^2 of green, 0.9 m^2 of blue and sufficient black paint for 6 m of edging.

Task

The Maths NZ logo is a stylised symmetrical green letter M, set in a blue sector that is edged in black. The black outline goes around the outer edges of the sector. The three triangles that are cut out of the bottom of the M are all the same size.

Investigate the amount of paint required to paint the logo. Produce a report for the company that:

- gives the paint requirements of the current logo
- explains a way that the design can be altered so that no additional paint is required.

In order for your proposed adaptation to be favourably received by Absolute Adventures Company, it should not be radically different from the original design.

Include in your report relevant calculations and/or diagrams. Use appropriate mathematical statements to communicate your findings.

