



How many ways can you prove it?

Topic: Geometry

The students will construct the bisector of an angle and using investigative methods will verify the construction.

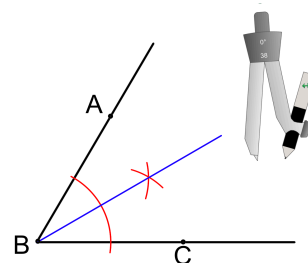
Year Group: 3rd Year

Level: Higher

Presenting the Problem

Task 1:

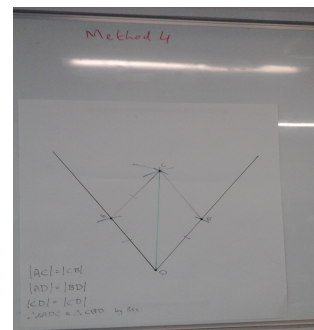
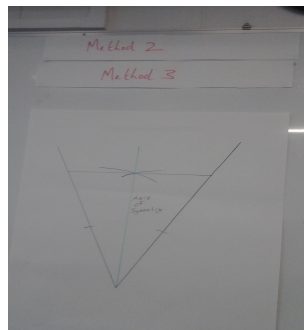
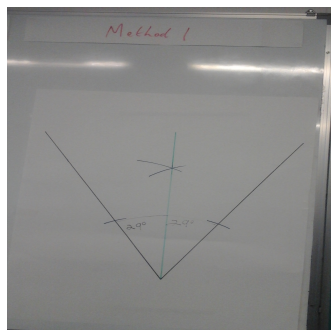
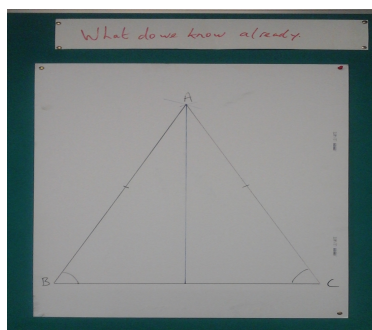
Your task is to draw an acute angle ABC and bisect this angle.



Task 2:

Prove that the line drawn is the bisector of the angle ABC using at least 3 different methods.

The Board Plan



Prior Knowledge & Posing the Task
10 minutes



Students working on the problem
10 minutes



Presentation of Solutions & Ceardaíocht
20 minutes



Summing up & Reflection
5 minutes

Reflecting on the Learning

We feel that this lesson proves that students are capable of constructing proofs using prior knowledge and as teachers we need to move towards investigative methods to teach formal proofs.

I learned that there are at least 6 ways to prove that you have bisected an angle.

Lesson Proposal developed by Patricia Tyrell, Eilish Kinsella, Ann Molloy and Brendan

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To download this lesson plan visit www.projectmaths.ie/mc2017

