



Coordinate Geometry meets Synthetic Geometry

Topics: Geometry, Trigonometry & Coordinate Geometry

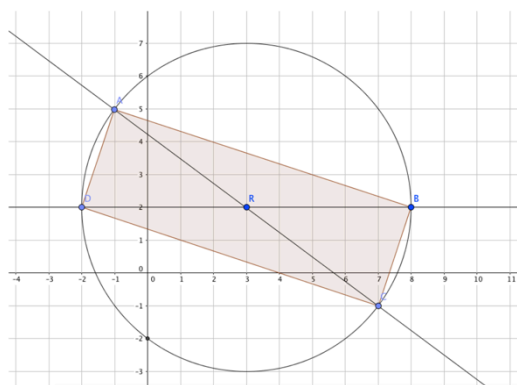
Students are challenged to prove that a given quadrilateral is a rectangle in as many ways as they can.

Year Group: 3rd Year

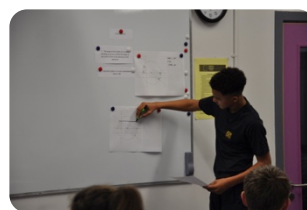
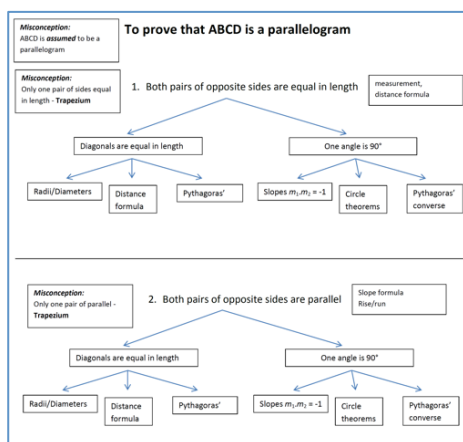
Level: Higher

Presenting the Problem

To Prove: ABCD is a rectangle



The Board Plan



Prior Knowledge & Posing the Task
10 minutes



Students working on the problem
25 minutes



Presentation of Solutions & Ceardaíocht
20 minutes

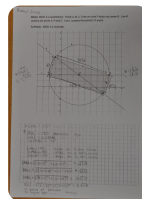


Summing up & Reflection
5 minutes

Reflecting on the Learning



Lesson was an excellent opportunity for students to make connections between various concepts in geometry. A rich variety of student approaches was observed during the lesson. Assuming that the quadrilateral was a parallelogram was a common misconception among students. This rich and engaging lesson resulting in much student discussion and debate; peer tutoring and teamwork was very evident throughout the lesson.



Developed by Declan Cathcart, Deborah Crean and Nadia Douglas, with the support of Jill Condell, Cathal Halpenny MDT and the students from Temple Carrig School, Greystones, Co. Wicklow.

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

