

Rearranging Equations Bookmark Competition

Rearranging equations is a vital skill in many professions and yet it a topic that students often find difficult. The aim of this competition is to encourage students to think carefully about equations and how to rearrange them. By creating their own bookmark that explains how to rearrange equations, they will (hopefully!) think carefully about the concepts involved and they can keep the bookmark as a guide to help them when the need arises.

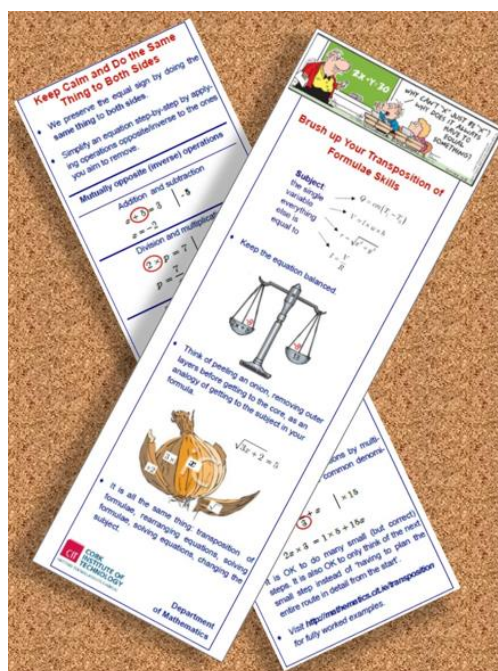
For students to learn the most from this exercise, they will need the guidance of their teachers. Ideally the topic could be discussed during Maths Week, outlining the concepts given below and allowing time for students to brainstorm ideas during class. This will allow teachers to demonstrate key concepts and catch any misconceptions.

Key Concepts

- Any equation can be represented in an infinite number of different but equivalent ways
- Respect the equality i.e. do the same to both sides of the equation to obtain an equivalent equation
- Simplify the equation/formula step by step by applying the inverse operations

Students should use images as well as equations and text to demonstrate key concepts and examples.

The bookmarks should be informative, helpful and, most of all fun!



Example of bookmark for third level students

Language

It is important that students use the correct language when explaining how to rearrange equations. Try to encourage the students to avoid unhelpful language that implies entities are moving e.g. 'move', 'shift', 'bring over' instead use 'get rid of', 'remove', 'have ... on the other side of equation', 'add ... to both sides of the equation', 'divide both sides of the equation by ...'

Competition Rules

Open to students from year 1 – transition year.

Two prize categories: first & second and third & transition years

Students can work in groups of size 1-3.

Only one entry per group.

The maximum size of the bookmark is 105 x 297mm (A4 paper folded in half lengthways).

Use both sides of the bookmark.

Take a photograph of both sides of your bookmark and email it to:

mathematicsCork@mtu.ie

The subject of the email should be 'Maths Week Competition'

Include your name, your teacher and your school.

Closing date for entries is 5th November 2021.

Notification: Winners will be notified within 30 days of the close of the competition by email.

Judging: An independent panel of judges will select the winning entries.