

# First mini-project for Workshop Group 6

## 1 Project extended deadline

The project should be emailed to [graham.ellis@nuigalway.ie](mailto:graham.ellis@nuigalway.ie) by 5pm Friday 20 November 2020

## 2 Project task

Choose one problem from the Okusun homework sheets and produce a pdf document of about 5 pages (it can be a bit shorter or a bit longer) that will help other students in the MA180 class learn how to solve the problem and provide them with some interesting background to the problem. The document should adhere to the guidelines on the module web page.

## 3 Assessment

The project will be assessed according to the scheme given in the guidelines on the module web page.

## 4 Some ideas

You will need to decide for yourselves on the *interesting background* to the problem. For instance, if your solution to the problem involves a proposition or theorem, then you could provide a statement and proof of it. Alternatively, or in addition, you could provide some details on the life of the mathematician who discovered the theorem or proposition. Some theorems (such as the Chinese Remainder Theorem) have a well-documented history which you could write about. It might be that your solution involves the use of an interesting definition (such as the  $\epsilon - \delta$  definition of a limit) which you could recall and illustrate with examples. Another possibility is to solve additional related problems that will help other students gain a clear understanding of the solution to the problem. Or maybe there is an application of the problem to the real-world (such as RSA cryptography) which you could describe. Or you could write a it about the biography of an inventor of the application. In short, the phrase *interesting background* can be interpreted very broadly.

## 5 Some tips

Make sure you read and address the assessment guidelines.

Remember to check you grammar. Sentences normally begin with a capital letter and end with a full stop. It is considered poor style to begin a sentence with a symbol. So instead of writing “6 is the answer.” write “The answer is 6.” Instead of writing “ $x = 6$ .” write “Let  $x = 6$ .”. It is good style to avoid unnecessary symbols. So instead of writing “ $\therefore x = 6$ .” write “Therefore  $x = 6$ .” Instead of writing “This  $\Rightarrow$  that.” write “This implies that.”.