



# Cheenta - Filix Math Olympiad Program

Starter Module

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## Day 4 - Forerunner problems

(Try these before coming to class)

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### **Problem 1**

Consider the following sequence of numbers: 0, 1, 1, 2, 3, 5, 8, 13, ...

Do you observe a pattern? Can you predict the next number in the sequence? What are the next 10 numbers in the sequence?

### **Problem 2**

In the previous classes we found Euler number, an invariant quantity in the world of certain solids.

Do you observe some invariant quantity in the sequence of numbers in Problem 1?

### **Problem 3**

Can you predict or find out the 500th term in the sequence?