



# Cheenta - Filix Math Olympiad Program

Starter Module

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## Day 3 - Forerunner problems

(Try these before coming to class)

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### Problem 1

Use the compass, pencil and a ruler to construct a regular hexagon (a six sided figure, each of whose sides are of equal length). You are not allowed to use the ruler to measure length but in some magical way you should be able to make sure that all sides of the hexagon are equal.

**Clue:** Start by drawing a circle with some radius using the compass.

### Problem 2

Count the number of vertices, edges and regions in the hexagon. Next draw the projection of the cube (like last class) and count the number of vertices, edges and regions in the projected image.

Do you see any similarity?

### Problem 3

Instead of hexagon can you try to draw a regular pentagon using compass and pencil?