

MATHEMATICS TRAILING

On the morning of Saturday 15 August 1992, small groups of teenagers could be seen around the Bukit Timah Campus seemingly concentrating intently on the walls of buildings, the steps, drain covers, manhole cover and even the numbers painted on car parking lots. No, they were not part-time building inspectors hired by the Development and Estate Division – they were Open Day visitors doing mathematics trailing.

A Maths Trail is a mathematical adventure where the explorer moves around a particular area, in this case the NIE campus, answering mathematics questions about his surroundings. The purpose of maths trailing is to arouse an awareness in the participants that mathematics is all around **them**. Professor Leo Tan, the Dean of School of Science, said "I see the Maths Trail as a good opportunity for people who see Maths as a dull and dry subject to experience how Maths can correlate with real life." Furthermore, to debunk the myth that

mathematics is all about formulae and precise answers and that one is only doing Maths when one does "Sums" with paper and pen, Maths trails usually emphasise skills such as estimation and mental calculation.

In the Mathematics Trail especially designed for the Open Day, participants signed up at the Tower Block and, being issued a booklet containing the questions and instructions proceeded down to the Students' Recreation Centre and up again through B Block, across the quadrangle, down to the Library and to the carpark in front of Oei Tiong Ham Building before ending the trail back at the Tower Block. Those who successfully completed the trail were awarded badges proclaiming "I conquered the NIE Maths Trail".

The mathematical tasks they had to perform included estimating the height of the Tower Block, working out the slopes of steps, estimating π using a

round manhole cover, estimating distances along the sides of quadrangle and the distance saved by cutting across diagonally and seeing patterns in car numbers.

It was encouraging to see students enthusiastically working out the problems in spite of the hot weather and it was especially heartening that the very first group of adventurers were a group of 5 students from the Singapore School for the Deaf.

At the end of the Open Day, more than 70 participants had "conquered" the trail and to the staff of the Division of Mathematics who planned and organised this event and to the PGDE(Sec) Mathematics trainee teachers who tested out the trail before the Open Day, the event was worth all the effort because it had allowed the participants to experience the relevance and the enjoyment of a subject dear to their hearts – MATHEMATICS!



Maths trail explorers using the length of drain covers to estimate distance.