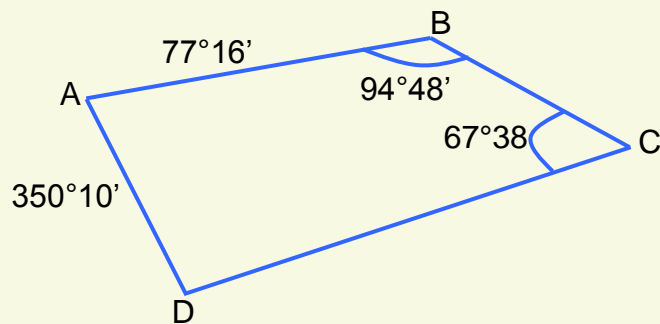


# MATHEMATICS

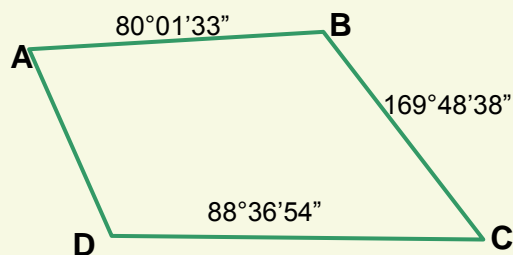
## Level Three

### Traversing

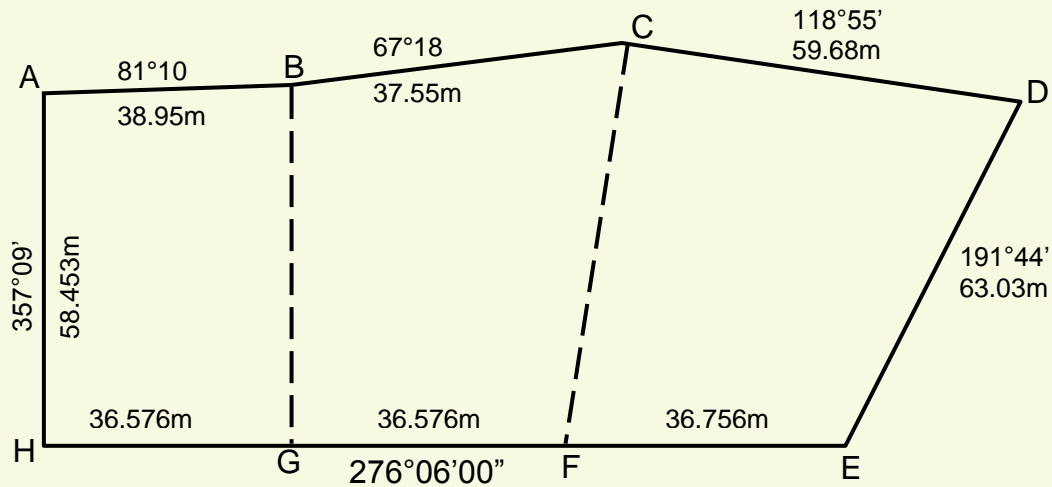
Bearings are angles measured clockwise from North, they vary between  $0^\circ$  and  $360^\circ$



- 1) The bearing AB is given to you, and is  $77^\circ 16'$ . Compute the bearing of BC and CD.
- 2) What are the interior angles at A and D?
- 3) Compute the value of the interior angles at B and C, given the bearings shown on the diagram below: -



- 4) Below is an outline of a traverse obtained by surveying a block of land needed to build new student flats. The land needs to be subdivided into three sections.



Beginning at A, calculate the changes in the northern and eastern directions for each line in the traverse. When you have finished the last line, add up the northern changes, then add up the eastern changes to check that they equal zero. Any difference from zero is called the “misclose”.

- Is there a misclose between A and H?
- Calculate the bearing and distance of BG
- Calculate the bearing and distance of CF