

Year 11 : Numeracy Paper 2 (Calculator Allowed)

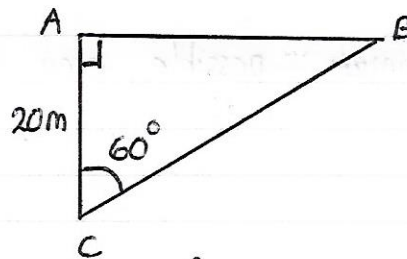
Mock Exam Prep : Sheet 2

- i) The table shows the times taken for a number of people to do a task

Time (mins)	Frequency
$0 < t < 8$	3
$8 \leq t < 16$	7
$16 \leq t < 24$	18
$24 \leq t < 32$	6

Calculate an estimate for the mean time taken to do the task. (Hint: create a mid-point column)

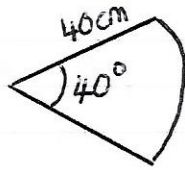
- 2) A farmer wants to erect a fence around the triangular field shown below.



- Fencing costs £6 per metre
- The farmer buys £550 worth of fencing.

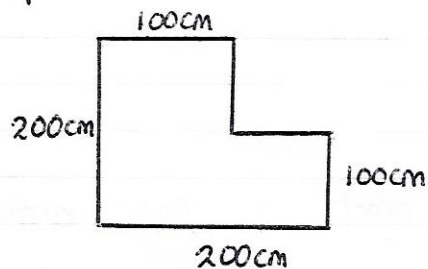
Has the farmer bought enough fencing?
 If so, how much fencing is left over?
 If not, by how much is the farmer short?

- 3) The diagram shows a metal plate in the form of a sector of a circle



- Calculate the area of the plate.
- Calculate the perimeter of the plate.

- 4) The diagram shows a large sign used as a logo outside a shop.



All measurements are to the nearest 20 cm.

- Calculate the maximum possible area of the sign in cm^2 .

- The sign needs to be painted on both sides.
 - A tin of paint has a coverage of $15\,000\text{ cm}^2$ measured to the nearest 1000 cm^2 .

Calculate the maximum number of tins that could be needed to paint both sides of the sign.