## ncfe. <br> NCFE Level 2 Functional Skills Qualification in Mathematics (603/5060/X)

| Paper number: | P001457 <br> Section A: |
| :--- | :--- |
| Non-calculator Test |  |

- Answer all questions.
- Read each question carefully.
- Write your answers in the spaces provided.
- Show your working, as marks may be awarded for working.
- State units in your answers, where appropriate.
- Check your work.


## Learner information

- Section A contains Activity 1 only.
- The maximum mark for this section is 15.
- The marks available for each question are shown in brackets.


## Resources

You will need a:

- pen, with black or blue ink
- pencil and eraser
- 30 cm ruler

| To be completed <br> by the examiner |  | Mark |
| :--- | :--- | ---: |
| A | Activity 1 | $/ 15$ |
| B | Activity 2 | $/ 15$ |
|  | Activity 3 | $/ 15$ |
|  | Activity 4 | $/ 15$ |
| TOTAL MARK |  | $/ 60$ |

- protractor.

If extra pages are used, please make sure your name and centre name are on them and they are securely fastened to this booklet.

Please complete the details below clearly and in BLOCK CAPITALS.

Learner name
Centre name

Learner number


Centre number $\square$

Do not turn over until the invigilator tells you to do so.

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## Activity 1: Motorcycle racing

1 (a) Damon is a motorcycle racer.
He takes part in two races over a weekend.
4650 spectators watched the race on Saturday.
This number increased by $2 \%$ on Sunday.
Increase 4650 by 2\%


1 (b) In the race on Saturday each lap was 2.678 miles long.
$1 \mathrm{~km}=0.6214$ miles
Round each of these two figures to 1 decimal place.
Use these values to estimate the length of the lap in km


1 (c) Damon and Ralphie each complete 7 laps in the race on Sunday.
The median lap time for Damon is 1 minute and 17.924 seconds.
This is shown as 1:17.924
The range of the lap times for Damon is 4.812 seconds.
The table below shows the lap times for Ralphie.

| Lap | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time <br> (minutes: <br> seconds) | $1: 21.467$ | $1: 19.148$ | $1: 17.986$ | $1: 16.008$ | $1: 16.810$ | $1: 17.841$ | $1: 18.462$ |

Calculate the median and the range of times for Ralphie.
Use these values to make two comparisons between the two racers.


1 (d) Damon drives along a straight part of the track at an average speed of 126 miles per hour.
He completes this in 47.5 seconds.
Work out the length of the straight part of the track in miles.

1 (e) Damon is paid by 3 companies to advertise their brands on his race suit.
$\frac{2}{3}$ of the adverts are for Company A.
$\frac{1}{7}$ of the adverts are for Company B.
The rest of the adverts are for Company C.
What fraction of the adverts are for Company C?


1 (f) 1540806 people followed Damon on social media last year.
This number increased by 674957 people this year.
Work out $1540806+674957$

[Total marks: 15]

This is the end of Section A.

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