## NCFE Level 1 Functional Skills Qualification in Mathematics (603/5055/6)

## Paper number: P001253 Section A: Non-calculator Test



Assessment window: Time allowed:

Monday 14 October 2019 - Friday 18 October 2019
30 minutes

## Learner instructions

- 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 $\mathbf{1 5}$.
- The marks available for each question are shown in brackets.


## Resources

You will need a:

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

- pen, with black or blue ink
- pencil and eraser
- 30 cm ruler
- 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 $\square$ Centre number $\square$
Do not turn over until the invigilator tells you to do so.

Examiner use only

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## Activity 1: Climbing mountains

1 (a) Don spends his holidays climbing mountains.
The twenty highest mountains in the UK are all in Scotland.

Don began climbing these mountains in 2011.
He climbed 4 of these mountains each year.


In which year did he finish climbing the twenty highest mountains?


1 (b) Don lives in London.
He wants to travel to Fort William in Scotland.
Don finds this information about travel times.

Travel times between
London and Fort William

| N | Night bus |
| :--- | :--- |
| Drive | 14 hours 11 minutes |
| Fly | 6 hours 42 minutes 31 minutes |

How much longer does it take to travel by the night bus than to fly?


1 (c) The cost of a return train ticket from London to Fort William is $£ 176$ Don sees an offer which gives him a 15\% discount.

How much money will Don save if he has the discount?


1 (d) Don is going to climb a mountain called Ben Nevis.
To estimate how long this will take he uses this rule:

- 12 minutes for every 1 kilometre (km) of distance forward plus
- 10 minutes for every 100 metres (m) of height gained.


The height of Ben Nevis is 1345 m
The distance forward is 17 km
Estimate how long it will take Don to climb Ben Nevis.
Give your answer to the nearest hour.


1 (e) The time taken to come down a mountain depends on the angle of the slope. Estimate the angle of this slope and tick the correct statement.



The angle is less than $5^{-}$


The angle is between $5^{\circ}$ and $12^{\circ}$
$\square$ The angle is more than $12^{\circ}$ but less than $90^{\circ}$
$\square$ The angle is more than $90^{\circ}$

1 (f) When Don arrives in Fort William

- the temperature at the bottom of Ben Nevis is $3^{\circ} \mathrm{C}$
- the temperature at the top of Ben Nevis is $-6^{\circ} \mathrm{C}$

Calculate the difference in temperature between the top and bottom of Ben Nevis.
$\square$
$\mathbf{1}$ (g) The weather forecast says that, at the top of Ben Nevis at 2 pm there is

- a $20 \%$ chance of snow
- a $\frac{3}{10}$ chance of rain.

Is it more likely to snow or rain?
Show your working.

[Total marks: 15]

This is the end of Section A.

$$
p^{2^{5}} \cdot p^{Q^{P^{Q^{K}}}}
$$

