## ncfe.

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

## Paper number: P001424 <br> Section B: Calculator Test

Time allowed:
1 hour 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 B contains Activities 2, 3 and 4.
- The maximum mark for this section is 45.
- 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
- protractor
- calculator.

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


Do not turn over until the invigilator tells you to do so.
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## Activity 2: Delivery driver

2 (a) Claire is a delivery driver.
She keeps a record of the times taken to make deliveries on Monday.

Delivery 1: 20 minutes
Delivery 2: 45 minutes
Delivery 3: 3 hours and 35 minutes
Delivery 4: 2 hours and 5 minutes

Claire says her deliveries took over $6 \frac{1}{2}$ hours on Monday.
Is she correct?
Show how you decide.

2 (b) Claire follows the same route every Tuesday.
Last Tuesday the route took Claire exactly 5 hours.
This Tuesday she completed the route in $20 \%$ less time.
How long did it take Claire to complete the route this Tuesday?


2 (c) To estimate the area she covers, Claire does the calculation $3 \times 45^{2}$ What answer should she get?

Your answer:

2 (d) Every Wednesday Claire delivers milk for a local farm.
She delivers 400 bottles of milk in total.
The ratio of bottles of semi skimmed to bottles of whole milk is $4: 1$
$30 \%$ of the bottles for semi skimmed milk are plastic.
$5 \%$ of the bottles for whole milk are plastic.
The rest of the milk bottles are glass.
Use this information to complete the table.
[5 marks]

|  | Plastic bottles | Glass bottles | Total |
| :---: | :---: | :---: | :---: |
| Semi skimmed <br> milk |  |  |  |
| Whole milk |  |  |  |
| Total |  |  |  |

2 (e) Claire charges the farm a fee of $£ 125$ for delivering their milk plus 45 p per mile. Which calculation shows the total charge in pounds for a 62-mile trip? Tick the correct calculation.

| $125+0.45+62$ |  |
| :---: | :--- |
| $125 \times 0.45 \times 62$ |  |
| $125+0.45 \times 62$ |  |
| $125 \times 0.45+62$ |  |

2 (f) On Thursday morning Claire drove 65 miles in total.
Claire finds this rule:


How many kilometres did she drive?


2 (g) Claire drove 120 kilometres on Thursday afternoon.
What is 120 kilometres in metres?
[1 mark]

2 (h) On Friday Claire delivers parcels.
She weighs four of the parcels.

| Weight (kilograms) |  |  |  |
| :---: | :---: | :---: | :---: |
| 3.505 | 3.05 | 3.5 | 3.055 |

Put these weights in order starting with the smallest.

## Activity 3: Staycation

3 (a) Alex and his family decide to hire a motorhome for a holiday.
They find these two deals:

| Company A |
| :---: |
| $£ 775$ per week |
| $10 \%$ off |


| Company B |
| :---: |
| $£ 825$ per week |
| $5 \%$ off |

Which company is giving more money off?
Show how you decide.
[2 marks]


3 (b) Alex then finds these two last-minute deals:

| Company C |
| :---: |
| Motorhome Hire |
| Next Week |
| $35 \%$ off |


| Company D |
| :---: |
| Motorhome Hire |
| Next Week |
| $\frac{2}{5}$ off |

Both companies charge the same amount before the offer.
Which company has the better discount? Show how you decide.


3 (c) Alex's daughter Amber has been saving pennies for her holiday spending money.

She has saved $14774 p$
What is the value of 14774 p in pounds?



3 (d) Alex drives the motorhome onto a campsite.
He drives in facing south and turns to face north west.
What is the size of the angle Alex has turned through?

Your answer:

3 (e) This map shows the position of the campsite and the beach.


How far is it from the campsite to the beach?


3 (f) Alex looks at the temperatures forecast for the next 5 days at the beach.

| Day | Temperature ( ${ }^{\circ} \mathbf{C}$ ) |
| :---: | :---: |
| Monday | 23 |
| Tuesday | 28 |
| Wednesday | 24 |
| Thursday | 15 |
| Friday | 18 |

Use this information to create a line graph.

Temperature at the beach

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3 (g) The family sits at an octagonal table for lunch.
Draw an octagon.

3 (h) The family keep a record of how many miles they drive each day.
The numbers have been rounded to the nearest mile.

| 85 | 10 | 22 | 45 | 72 | 56 | 51 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 42 | 45 | 59 | 26 | 38 | 18 |
| 21 | 5 | 25 | 41 | 32 | 28 | 75 |

Use the data to complete the grouped frequency table below.

| Number of Miles | Number of Days |
| :---: | :---: |
| $0-19$ |  |
| $20-39$ |  |
| $40-59$ |  |
| $60+$ |  |
| Total |  |

## Activity 4: Using the internet

4 (a) Rana uses a comparison website to get a quote for her electricity bill.
She finds these six quotes.

| $£ 490$ | $£ 508$ | $£ 522$ | $£ 483$ | $£ 474$ | $£ 496$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

Calculate the range of these quotes.


4 (b) Rana uses online banking to apply for a loan.
She takes out a loan for $£ 1725$ over 3 years.
The interest rate is $5 \%$ simple interest per year.
How much will Rana pay back in total?


4 (c) Rana does some online shopping.
She needs to buy a lunch box and finds this information:

| Colour | Red | Green | Yellow | Blue |
| :---: | :---: | :---: | :---: | :---: |
| Number in stock | 8 | 2 | 6 | 4 |

The company selects a lunch box at random from those in stock.
What is the probability that the company selects a green lunch box?
Mark your answer on the probability scale below.


4 (d) Rana wants to buy a dress online.
The dress comes in these four different lengths.

| Dress | Short | Mid | Long | Maxi |
| :---: | :---: | :---: | :---: | :---: |
| Length | 76 cm | 94 cm | 102 cm | 147 cm |

Rana wants the dress with length closest to 40 inches.
She knows that to convert inches into cm she needs to multiply the inches by 2.54

Which length dress does Rana buy?
Show how you decide.


4 (e) Rana sets up a monthly delivery for some everyday items.
If she arranges for the same five items to be delivered every month, she will receive a $15 \%$ discount.

The original total cost of the items is $£ 87$
What is the total cost of the items after the discount?


4 (f) Rana uses her online banking app to check her spending.

| Category | Amount spent <br> to the nearest pound |
| :---: | :---: |
| Rent | 800 |
| Utilities | 360 |
| Entertainment | 100 |
| Shopping | 180 |
| Total | $\mathbf{1 4 4 0}$ |

Draw a pie chart to represent the amount Rana spent on each category.

Amount spent on each category

4 (g) Rana checks her bank balance.
It is $£ 46.15$

She knows there is a direct debit for $£ 50$ due to come out of her account.
What is $£ 46.15-£ 50 ?$


4 (h) In May 2020, online sales in the UK increased by 130\%
$130 \%$ is the same as one and three tenths.
Write one and three tenths using numbers.

[Total marks: 15]

This is the end of the assessment.

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