## NCFE Level 2 Functional Skills Qualification in Mathematics (603/5060/X)

## Paper number: Practice P001270 Section A: Non-calculator Test

Time allowed: 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 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 $\square$ Centre number $\square$

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

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## Activity 1: Buying and selling

1 (a) Hannah wants to make some money by buying items at a car boot sale, and then selling them.

The table shows the items that Hannah has recently bought, and then sold.
She records the profit (+) or loss (-) that she made on each item.

| Item | Profit or Loss |
| :---: | :---: |
| Blue bowl | $+£ 2.85$ |
| China dog | $-£ 5.35$ |
| Set of teaspoons | $+£ 4.95$ |
| Small table | $-£ 4.25$ |
| Lamp | $+£ 2.70$ |

What was the total profit or loss that Hannah made when she sold these items? Give your answer in $£$

Your answer:
$£$
Profit
or


1 (b) Hannah goes to another car boot sale to sell some items.
She paid $£ 155$ for the items she hopes to sell.
How much will Hannah need to sell these items for to make a $17.5 \%$ profit?
[3 marks]


1 (c) Hannah takes some items to a market to sell.
The scatter diagram shows the price Hannah paid for each item, and the amount she sells it for.

Price item sold for (£)

Item prices


The line drawn on the scatter diagram marks the prices where Hannah makes no profit or loss.

Hannah thinks she made a profit on more than half of her items.
Is she correct? Explain your answer.
$\square$

1 (d) Hannah buys two gold necklaces.


She sees an advert online offering to buy jewellery.

## CashForYou

Post us your old gold jewellery. We pay $£ 18$ per gram of gold.

If Hannah sends both necklaces to CashForYou, will she make a profit? Show your working.

Use the conversion: 1 ounce $=28$ grams ( g )

Your answer:

1 (e) Hannah wants to know how much money she might get for a toy car if she sells it on an online auction website.

She finds that the same make of toy car has been sold for different prices.

| Price paid on online <br> auction website | Number of toy cars sold |
| :---: | :---: |
| $£ 0-£ 9.99$ | 6 |
| $£ 10-£ 19.99$ | 5 |
| $£ 20-£ 29.99$ | 6 |
| $£ 30-£ 39.99$ | 3 |

Use the data to calculate the estimated mean price paid for the toy car on the online auction website.

1 (f) The probability that Hannah makes a profit when she sells any item at an online auction is 0.8

What is the probability that neither of the next two items she sells at an online auction makes a profit?

[Total marks: 15]

This is the end of Section A.

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