## AQA

Please write clearly in block capitals.

Centre number |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

Candidate number


Surname
Forename(s) $\qquad$
Candidate signature I declare this is my own work.

## Functional Skills Level 1 MATHEMATICS

## Paper 2 Calculator

## Monday 9 January 2023

## Materials

For this paper you must have:

- a calculator
- mathematical instruments.


## Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Answer all questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).

Time allowed: 1 hour 30 minutes

- Do all rough work in this book. Cross through any work you do not want to be marked.
- State the units of your answer where appropriate.


## Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 60 .
- You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.


## Advice

In all calculations, show clearly how you work out your answer.
Circle the shape that has only one line of symmetry.

Answer all questions in the spaces provided.

1 Circle the shape that has only one line of symmetry.
2.45
2.035
2.6
2.702
$\qquad$

Answer $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$
3 Write in digits the number three thousand and seventy one

Do not write outside the box

Answer $\qquad$

4 You are facing East.
You turn $180^{\circ}$
What direction are you facing now?

Answer $\qquad$

5 Complete the table to show equivalent fractions, decimals and percentages.

| Fraction | Decimal | Percentage |
| :---: | :---: | :---: |
|  | 0.65 | $65 \%$ |
| $\frac{7}{10}$ | 0.7 |  |


| 6 |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 6 | 8 | 4 | 2 | 5 | 6 | 5 | 1 | 1 | 8 |
| 3 | 2 | 1 | 10 | 12 | 8 | 9 | 3 | 7 | 1 |

Complete the grouped frequency table with the tallies and frequencies.

| Value | Tally | Frequency |
| :---: | :---: | :---: |
| $1-3$ |  |  |
| $4-6$ |  |  |
| $7-9$ |  |  |
| $10-12$ |  |  |



Work out the area of the L-shape.


A Party
Gemma is planning a birthday party for her daughter.
8 (a) Gemma will hire a hall for the party.

## Hall for hire

£15.75 per hour
plus $£ 32$ cleaning charge

Gemma will hire the hall so that she has
30 minutes to set up before the party
the party from 4.30 pm to 6.30 pm
30 minutes to tidy up after the party.
Is $£ 80$ enough to pay for the hall hire and the cleaning charge?
You must show your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
8 (b) Gemma orders pizzas for the party.
Each pizza has 8 slices.
Each person will get 3 slices.
How many pizzas should Gemma order for 30 people?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$

Question 8 continues on the next page
8 (c) Gemma makes a fruit drink for the party.
She uses this recipe.
Mix cranberry juice and orange juice in the ratio
cranberry : orange $=1: 4$

Gemma wants to make 280 millilitres of the drink for each person.
She has 2 litres of cranberry juice.
She has plenty of orange juice.
Does Gemma have enough cranberry juice to make the drink for 30 people? You must show your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

| 9 | Pets |
| :---: | :---: |
| 9 (a) | The weight of Nina's dog has increased from 5.4 kg to 6.1 kg |
|  | Nina says, |
|  | "His weight has increased by more than 15\%" |
|  | Is Nina correct? |
|  | You must show your working. |

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Question 9 continues on the next page

## 9 (b) Jack is a vet.

He collects this information about 20 pets that he sees.

| Type of Pet | Number of Pets |
| :---: | :---: |
| Dog | 10 |
| Cat | 6 |
| Rabbit | 4 |

Draw a suitable diagram to show this information.



Milly needs to add 2 millilitres of a chemical for each litre of water in the tank. $1000 \mathrm{~cm}^{3}=1$ litre

How many millilitres of the chemical should Milly add to her tank?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$ millilitres

10 The Cafe $\quad |$| Do not write |
| :--- |
| outside the |
| box |

10 (a) Marsha owns a cafe.
The cafe is open 7 days a week.
Marsha needs a part-time assistant each day.
She can afford to pay the new assistant $£ 168$ per week.
The hourly rate of pay is $£ 9.60$
She will employ the assistant for the same number of hours each day.
For how many hours can Marsha employ the new assistant each day?
Give your answer as a decimal.
[3 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$ hours
10 (b) This is part of the menu from the cafe.

| MENU |  |
| :--- | ---: |
| Coffee | Tea |
| Toasted Sandwich | $£ 2.25$ |
|  | $£ 3.80$ |

There is a special offer on toasted sandwiches.


A customer orders
1 coffee
1 tea
2 toasted sandwiches.
He pays with a $£ 20$ note.
How much change should he get?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer £ $\qquad$

10 (c) This table shows the number of customers who visited the cafe in one week.

| Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 45 | 64 | 74 | 41 | 83 | 120 | 77 |

Marsha says,
"The mean number of customers per day that week was more than 75 "
Is Marsha correct?
You must show your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## 11 Cake company

Nico sells cupcakes in boxes.

11 (a) Nico wants to make an individual cupcake box with a lid out of a sheet of card.
The cupcake box will be a cube of side length 8 cm
He will cut out a net of the cube to make the box.
The square grid shows the piece of card he wants to use for each box.
Draw a net for the box to check that this piece of card is large enough.
One part of the net has been drawn for you.

Scale: $\square$ represents a 2 cm by 2 cm square


11 (b) The table shows the number of boxes of cupcakes in one order from a customer.

| Size of cupcake box | Price per box <br> $\mathbf{( £ )}$ | Number of boxes <br> ordered |
| :---: | :---: | :---: |
| Small | 3.15 | 5 |
| Medium | 10.75 | 4 |
| Large | 15.45 | 2 |

Nico charges a handling fee for this order.

$$
\text { Handling fee }=20 \text { p per box }+£ 1.50
$$

Work out the total amount, including the handling fee, that this customer has to pay.
[5 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer £ $\qquad$

11 (c) The pie chart represents the income from the sale of boxes of cupcakes last year.


The total income from the sale of boxes of cupcakes was $£ 16200$ Nico says,
"The income from large boxes of cupcakes was more than $£ 10000$ " Is he correct?
You must show your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Question 11 continues on the next page

| 11 (d) | Nico opens a new bank account. <br> He puts $£ 295$ into the account. <br> $5 \%$ interest is added to the account each year. <br> After one year Nico takes $£ 269$ from the account to buy a new mixer. <br> How much is left in the account? |
| :---: | :---: |

He puts $£ 295$ into the account.
$5 \%$ interest is added to the account each year.
After one year Nico takes $£ 269$ from the account to buy a new mixer.
How much is left in the account?







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