## AQA

Please write clearly in block capitals.

Centre number $\square$ Candidate number


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

## Functional Skills Level 1 MATHEMATICS

## Paper 2 Calculator

Time allowed: 1 hour 30 minutes

## 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).
- Do all rough work in this book. Cross through any work you do not want to be marked.

| For Examiner's Use |  |
| :---: | :---: |
| Question | Mark |
| $1-7$ |  |
| 8 |  |
| 9 |  |
| 10 |  |
| 11 |  |
| TOTAL |  |

- 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.
- If your calculator does not have a $\pi$ button, take the value of $\pi$ to be 3.142


## Advice

In all calculations, show clearly how you work out your answer.


A fair, ordinary dice is rolled once.
On the line, mark with an ' $X$ ' the probability that the dice lands on an even number.

$\begin{array}{lllllll}-8 & 3 & -5 & -1 & 2 & 0 & -2\end{array}$

Answer
4 Measure the size of angle $x$.

Answer $\qquad$ $\circ$

5 Draw all the lines of symmetry on this shape.


Turn over for the next question

6 Work out which is smaller, $15 \%$ of 180 or $20 \%$ of 120
You must show your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

7 Here are five numbers.
37
58
19
12
58

Work out the range.
[2 marks]
$\qquad$
$\qquad$

Answer


Melissa says,
"More than a quarter of the items sold were shirts."
Is Melissa correct?
You must show your working.
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$\qquad$
$\qquad$
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$\qquad$
$\qquad$
Question 8 continues on the next page

8 (b) When Melissa sells clothing for recycling, she receives
a basic amount of $£ 1.20$ per 500 g of clothing
$10 \%$ extra if she sells a batch with more than 100 kg of clothing.
Melissa sells a batch with 143.5 kg of clothing for recycling.
How much does she receive?
[5 marks]
$\qquad$
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Answer £ $\qquad$

8 (c) Melissa sells bottles of shampoo in the charity shop.


Melissa fills the bottles from a container that holds 12 litres.
How many bottles can Melissa fill from the container?
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer
$9 \quad$ Bakery
Brandon works in a bakery.
9 (a) Brandon uses scone mix to make scones.
He needs 360 g of scone mix to make 8 scones.
Brandon
wants to make 40 scones
has 200 g of scone mix.
How much more scone mix does he need?
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer g

9 (b) Brandon is making a birthday cake in a T shape.
Here is a plan view of the cake.


Brandon has enough icing for an area of $200 \mathrm{~cm}^{2}$
Does he have enough icing for the top of the cake?
You must show your working.
$\qquad$
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Question 9 continues on the next page

9 (c) Brandon wants to buy a box large enough to hold 16 kg of flour.
He uses this formula.

$$
\text { Volume of container }\left(\mathrm{cm}^{3}\right)=\text { Weight of flour }(\mathrm{kg}) \times 2400
$$

He sees this cuboid box for sale.

Not drawn accurately


Can this box hold 16 kg of flour?
You must show your working.
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| 10 | Working from home |  |
| :---: | :---: | :---: |
|  | Spencer works from home for a call centre. |  |
| 10 (a) | Spencer works |  |
|  | 3 days a week |  |
|  | from 7.30 am until 12 noon each day. |  |
|  | He is paid $£ 151.47$ per week. |  |
|  | Is this more than $£ 11$ per hour? |  |
|  | You must show your working. |  |
|  |  | [4 marks] |
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Spencer works from home for a call centre.
10 (a) Spencer works
3 days a week
from 7.30 am until 12 noon each day.
He is paid $£ 151.47$ per week.
Is this more than $£ 11$ per hour?
You must show your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Question 10 continues on the next page

10 (b) Spencer can claim an amount for each page he prints for work. One month,
he claimed $£ 2.76$
he printed 138 pages.
The next month, he printed 97 pages.
At the same rate, how much can Spencer claim?
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer £ $\qquad$

10 (c) Spencer makes phone calls for work.
He has a target that on average his calls should last less than 5 minutes.
Here are the times that his calls lasted one day.

Time spent on phone calls in minutes

| 7 | 3 | 2 | 11 | 7 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 6 | 5 | 9 | 1 | 6 | 7 |

Did Spencer hit his target that day?
You must show your working.
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## Turn over for the next question

## 11 School leavers

Students leave a school at the end of Year 11

11 (a) The pie chart shows what students did when they left the school last year.


90 students went to a school with a 6th form.
How many more students went to college than started an apprenticeship?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$

| 11 (b) | On the last day, the students will have a 40 -minute lunch then a 15-minute registration then a 35 -minute assembly. <br> The students will leave school at 1.50 pm <br> What is the latest time lunch should start? | [3 marks] |
| :---: | :---: | :---: |

have a 40-minute lunch
then a 15-minute registration
then a 35-minute assembly.
The students will leave school at 1.50 pm
What is the latest time lunch should start?
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$\qquad$

Answer $\qquad$

## Question 11 continues on the next page

11 (c) Javed is going to be an apprentice bricklayer.
He needs to buy two jackets.
He sees these offers in two shops.

| Shop A |
| :---: |
| Jackets usual price $£ 24$ |
| Special Offer |
| $\frac{1}{3}$ off the usual price | | Shop B |
| :---: |
| Jackets usual price $£ 21.80$ |
| Special Offer |
| Buy one, get second |
| half price |

He wants to pay the lowest price possible.
Which of these shops should Javed choose?
You must show your working.
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END OF QUESTIONS



| Question number | Additional page, if required. Write the question numbers in the left-hand margin. |
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