AQA

## Surname

Forename(s)
Centre Number
Candidate Number
Candidate Signature
I declare this is my own work.
Functional Skills Level 1
MATHEMATICS
Paper 2 Calculator 8361/2

Thursday 3 November 2022 Afternoon Time allowed: 1 hour 30 minutes

At the top of the page, write your surname and forename(s), your centre number, your candidate number and add your signature.
[Turn over]


## 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 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.
- 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.

DO NOT TURN OVER UNTIL TOLD TO
DO SO


## SECTION A

Answer ALL questions in the spaces provided.

1 A fair six-sided dice is rolled.
Which letter shows the probability of landing on an even number?

Circle your answer. [1 mark]


2 Circle the fraction with the same value as $3 \frac{3}{4}$ [1 mark]
$\frac{9}{4}$
$\frac{10}{4}$
$\frac{13}{4}$
$\frac{15}{4}$

3 Measure the size of angle $x$ [1 mark]


Answer
0
[Turn over]


4 Calculate - $5 \times-6$ [1 mark]

## Answer

5 The front elevation and side elevation of a shape are shown.

## FRONT ELEVATION



## SIDE ELEVATION



Which shape has these elevations?

## Circle the correct letter. [1 mark]

A


B

c


D

[Turn over]

## 8

6 Round 14.76 to one decimal place. [1 mark]

## Answer

7 Here are six numbers.
16
19
16
10
17
12

Work out the mean. [3 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer

## 8 Increase 630 by 40\% [3 marks]

## [Turn over]

## SECTION B

Answer ALL questions in the spaces provided.

9 THE KITCHEN FITTER
Ryan is a kitchen fitter.

9(a) A customer wants cupboards along one wall of her kitchen.

Ryan can choose from these cupboards.


He can choose some of each size.

The length of the wall is 3.45 METRES.
[Turn over]

12

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# How many of each cupboard could Ryan choose so that they fit the length of the wall with no gaps? [4 marks] 

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

Number of large cupboards

Number of small cupboards

## 9 (b) A different customer wants

3 large cupboards with width 600 mm and depth 600 mm
2 small cupboards with width 450 mm and depth 600 mm

## LARGE



SMALL


## BLANK PAGE

[Turn over]

# The cupboards will fit along ONE wall of this customer's kitchen. 

The grid on the page opposite shows a scale drawing of the kitchen.

The scale is
1 cm represents 150 mm
Use the grid to draw a plan of where Ryan could fit the cupboards. [4 marks]

## SCALE: 1 cm represents 150 mm

Wall

[Turn over]

## 9(c) This is the price list for Ryan's kitchen cupboards.

|  | Price per cupboard |
| :--- | :--- |
| Large <br> cupboard | $£ 85.50$ |
| Small <br> cupboard | $£ 75.00$ |

There is a special offer.

Large cupboards<br>Buy one, get one half price

A customer wants to order 6 large cupboards and

2 small cupboards.

The customer has a budget of $£ 550$
Does the customer have enough money to buy these cupboards?

You MUST show your working.
[5 marks]
[Turn over]


20


Erik grows daffodils on his farm.

[Turn over]

## 22

## 10(a) This is a sketch of a field where Erik will grow daffodils.

It is not drawn accurately.


Erik plants 1.25 kg of daffodil
bulbs per square metre of land.
He has 20 tonnes of bulbs. 1 tonne = 1000 kg

## 23

## Does Erik have enough bulbs to plant all of this field?

You MUST show your working. [5 marks]

## [Turn over]

24
10 (b) Joe picks flowers on Erik's farm.
Joe is paid $£ 8.29$ for each box he fills with flowers.

The flower-picking season lasts for 10 weeks.

The list shows the number of boxes Joe filled each week for the first 5 weeks.
$\begin{array}{lllll}55 & 47 & 45 & 44 & 59\end{array}$
Estimate how much Joe can expect to earn for the full 10-week season.

You MUST show your working. [4 marks]

25

Answer £
[Turn over]

## 26

## 10 (c) Erik plants different types of daffodils in his fields.

Here is some data about the area he planted with each type of daffodil.

| Type of <br> daffodil | Area planted $\left(\mathrm{m}^{2}\right)$ |
| :--- | :--- |
| Golden Ducat | 88000 |
| White Lion | 72000 |
| Ice Follies | 46000 |
| Pink Pride | 34000 |

On the opposite page, draw a suitable chart to show this data. [4 marks]

27
(

## [Turn over]

## 28

## 11 PARCELS

## Sam sends parcels using couriers.



11 (a) The table shows information about the cost of sending parcels with Go Parcels.

| WEIGHT RANGE | COST |
| :--- | :--- |
| Up to 1 kg | $£ 5.99$ |
| More than 1 kg up to 10 kg | $£ 12.99$ |
| More than 10 kg up to 15 kg | $£ 14.24$ |
| More than 15 kg up to 20 kg | $£ 25.49$ |

29
Sam needs to send items weighing $2 \mathrm{~kg}, 4 \mathrm{~kg}$ and 11 kg

Sam can combine the three items into one parcel before sending.

How much cheaper is it to send one combined parcel rather than three separate parcels? [4 marks]

30

## Answer £

## BLANK PAGE

## [Turn over]

11 (b) Sam sends a parcel with a different courier, Package Plus.

The parcel is a cuboid box measuring 2 m by 0.4 m by 0.6 m


Package Plus charges using the
formula
Cost $(£)=£ 15.25$ +
(volume of parcel in $\mathrm{m}^{\mathbf{3}} \times £ 4.25$ )
Sam pays with a $£ 20$ note.

## How much change should Sam receive? [5 marks]

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

Answer£
[Turn over]

12 THE THEATRE

# Amy is going to a theatre show in Chichester. 

12 (a) Amy will travel by train to Chichester.

Amy has a railcard that gives her
1
$\overline{3}$ off the normal price of a train
ticket.

The normal price of a return ticket to Chichester is $£ 16.83$

Amy says,
"My ticket will cost LESS THAN £11 if I use my railcard."

Is Amy correct?

## You MUST show your working. [3 marks]

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
[Turn over]

12 (b) The theatre sells ice creams at the interval.

## All the ice creams cost the same amount.

Amy buys herself and her two friends an ice cream each.

The total cost is $£ 8.40$
How much does it cost to buy 7 ice creams? [3 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

37

## Answer £

## [Turn over]

12 (c) At the theatre, the show starts at 7.30 pm

The show lasts for 105 minutes plus a 20-minute interval.

At the end of the show, it will take Amy 35 minutes to get to the station.

A train leaves the station at 22.17
Can Amy catch this train?
You MUST show your working. [4 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$

39
[Turn over]

## 40

12 (d) Jai works in the box office at the theatre.

The theatre has 1206 seats.

For this performance, the ratio of tickets sold to tickets not sold is $5: 1$

Jai says,
"We have sold more than
1000 tickets for this performance." Show that he is correct. [3 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$

41

END OF QUESTIONS

## $42$

$\qquad$

43

## Additional page, if required. Write the question numbers in the left-hand margin.

$\qquad$

## 44

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| For Examiner's Use |  |
| :---: | :---: |
| Question | Mark |
| $1-8$ |  |
| 9 |  |
| 10 |  |
| 11 |  |
| 12 |  |
| TOTAL |  |

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