## Surname

Forename(s)
Centre Number
Candidate Number
Candidate Signature
I declare this is my own work.

# Functional Skills Level 2 <br> MATHEMATICS 

Paper 1 Non-Calculator
8362/1

Thursday 3 November 2022
Morning

Time allowed: $\mathbf{3 0}$ 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:

- mathematical instruments.

You must NOT use a calculator.


## 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 20.
- 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 Circle the calculation that increases 80 by $47 \%$ [1 mark]
$80+0.47$
$80 \times 0.47$
$80 \div 1.47$
$80 \times 1.47$

2 Write $\frac{5}{8}$ as a decimal. [1 mark]

Answer

3 Circle the largest number. [1 mark]
$\begin{array}{llll}-8 & -2 & -5 & -15\end{array}$

## [Turn over]

4 An event has four possible independent outcomes, A, $B, C$ or $D$.

The table shows the probabilities of three of the outcomes.

| Outcome | A | B | C | D |
| :--- | :--- | :--- | :--- | :--- |
| Probability | 0.23 | 0.071 |  | 0.538 |

Work out the probability of outcome C. [2 marks]

## Answer

5 Work out $\frac{2\left(9^{2}-31\right)}{5}$ [3 marks]

## Answer

[Turn over]

## SECTION B

Answer ALL questions in the spaces provided.

## 6 FRUIT AND VEGETABLES

Alana grows fruit and vegetables in her garden.

6 (a) Alana wants to change the layout of her garden.
Alana wants to have

- a rectangular vegetable patch 3 m by 15 m
- a rectangular greenhouse 4.5 m by 6 m
- a circular fruit patch with a radius of 3 m

The centimetre grid, on the opposite page, represents a scale drawing of the garden.

Draw and label a possible plan for the garden on the grid.

Use the scale 2 cm represents $\mathbf{3 m}$ [4 marks]

## 9

## SCALE: 2 cm represents 3 m


[Turn over]

6 (b) Last year, Alana grew raspberries
INSIDE, in her greenhouse
and
OUTSIDE, on her fruit patch.
Here is the data for the 10 raspberry plants grown INSIDE.

Number of raspberries per plant

| 324 | 297 | 304 | 321 | 310 |
| :--- | :--- | :--- | :--- | :--- |
| 333 | 293 | 301 | 320 | 295 |

Here is some information about the raspberry plants grown OUTSIDE.

| Number of raspberries per plant |  |
| :--- | :--- |
| Median | 298 |
| Range | 78 |

This year, Alana wants to grow all the raspberries in the place where the number of raspberries per plant has the higher average
and
is more consistent.
Should she grow the raspberries inside or outside?
Show working to support your answer. [5 marks]

## [Turn over]

## Answer

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[Turn over]

6 (c) Alana wants to make raspberry jam.
She uses this recipe.

RASPBERRY JAM
Mix $\mathbf{2} \mathbf{~ k g}$ of raspberries with 2.4 kg of sugar

Alana has
3.5 kg of raspberries
and
4 kg of sugar.
Alana wants to use all the raspberries.
How much MORE sugar does she need?
Give your answer in grams. [3 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Answer

 gramsEND OF QUESTIONS
$\overline{ } \quad \overline{12}$
$\qquad$
$\qquad$

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| For Examiner's <br> Use |  |
| :---: | :---: |
| Question | Mark |
| $1-5$ |  |
| 6 |  |
| TOTAL |  |

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