AQA

Please write clearly in block capitals.

Centre number | | | | | | Candidate number | | | | |

Surname _____

Forename(s) _____

Candidate signature _____

I declare this is my own work.

Functional Skills Level 2
MATHEMATICS

Paper 1 Non-Calculator

Thursday 3 November 2022 Morning Time allowed: 30 minutes

Materials

For this paper you must have:
- mathematical instruments.

You must **not** use a calculator.

For Examiner's Use	
Question	Mark
1–5	
6	
TOTAL	

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.
- 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.

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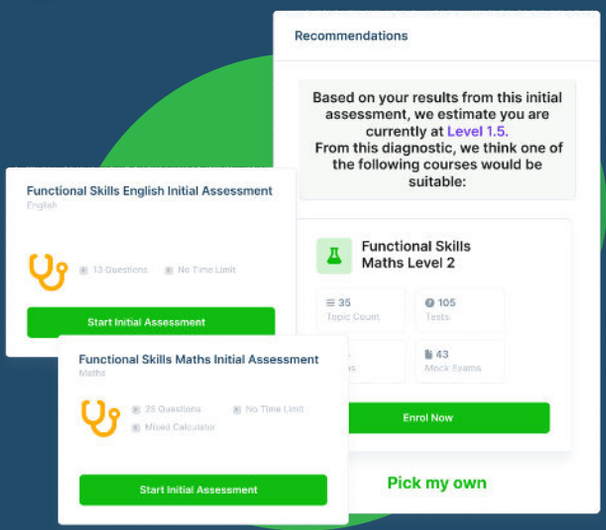
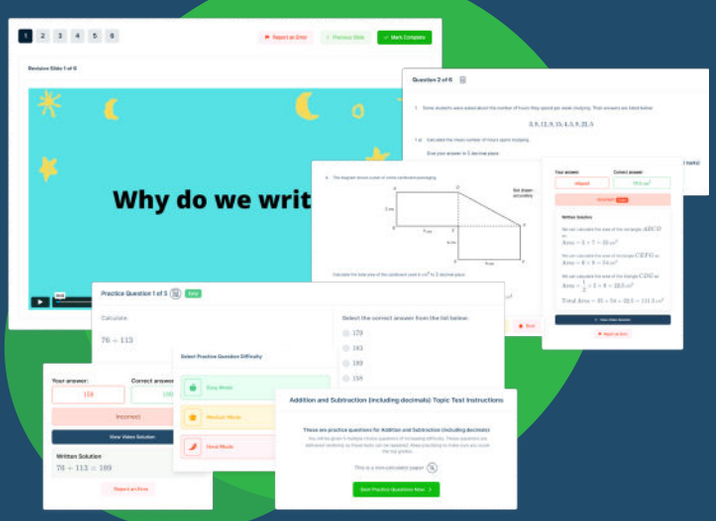
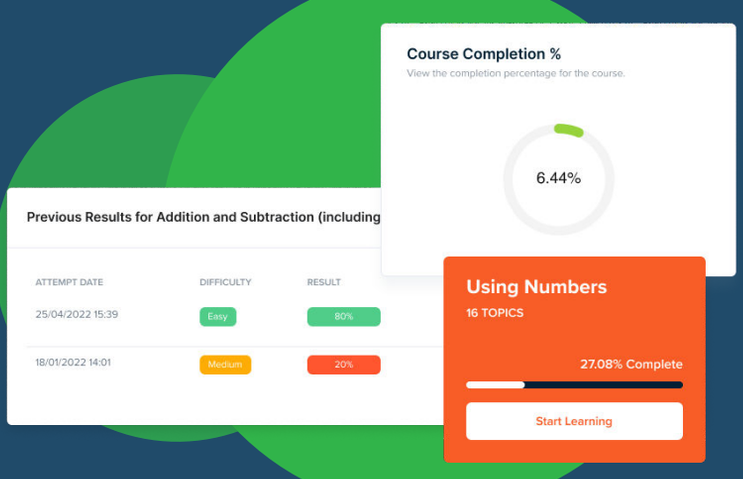
FUNCTIONAL SKILLS ONLINE COURSES



- Your answers are analysed to determine your Current Level
- Suggested courses for you to enrol on based on your calculated level
- Always know the level you are currently working at
- Determine when you are ready to sit your exam

- Explainer videos on every topic
- Quick-fire style mutiple choice questions
- Test your knowledge with exam-style questions
- Written solutions for all questions





- See your progress through as you progress through each topic area
- Get your average scores for practice questions, topic tests and mock exams
- View all practice question, topic test and mock exam attempts over time
- View historical attempts to analyse your progress over time

Or visit
passfunctionalskills.co.uk

Do not write outside the box

Section A

Answer **all** questions in the spaces provided.

1 Circle the calculation that increases 80 by 47%

[1 mark]

80 + 0.47 | 80 × 0.47 | 80 ÷ 1.47 | (80 × 1.47)

2 Write $\frac{5}{8}$ as a decimal.

[1 mark]

$$8 \overline{)5.5^{2}0^{4}0^{0}0} \quad 0.625$$

Answer 0.625

3 Circle the largest number.

[1 mark]

–8 | (–2) | –5 | –15

Do not write outside the box

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	0.161	0.538

Work out the probability of outcome C.

[2 marks]

0.23 + 0.071 + 0.538 = 0839

1 − 0.839 = 0.161

Answer 0.161

5 Work out $\frac{2(9^2 - 31)}{5}$

[3 marks]

$9^2 = 81$ $\quad \frac{2(81-31)}{5} = \frac{2 \times 50}{5} = \frac{100}{5}$

$= 20$

Answer 20

8

Turn over for Section B

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

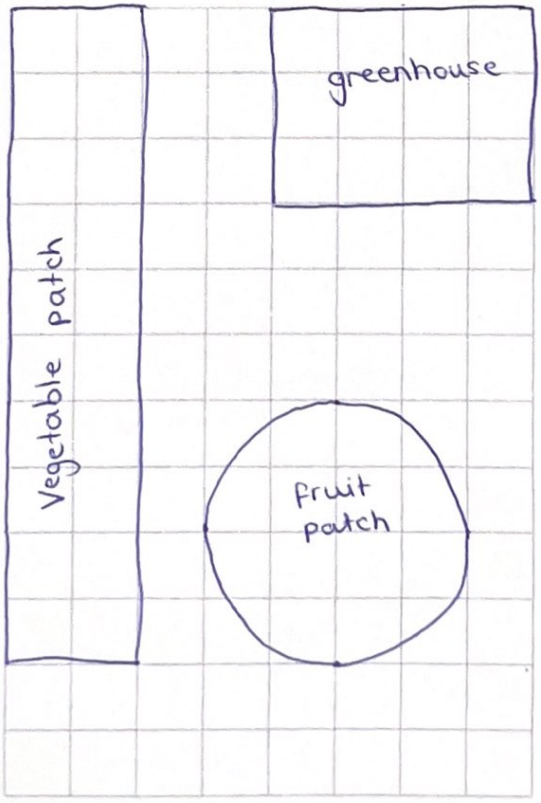
The centimetre grid represents a scale drawing of the garden.

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

Use the scale 2 cm represents 3 m

[4 marks]

Scale: 2 cm represents 3 m



Do not write outside the box

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]

INSIDE: 293, 295, 297, 301, 304, 310, 320, 321, 324, 333

median

$\frac{310 + 304}{2} = 307$

Range = 333 − 293

= 40

Inside as the median is higher and the range is smaller meaning there's more consistency.

Answer Inside

Turn over ▶

Do not write outside the box

6 (c) Alana wants to make raspberry jam.

She uses this recipe.

> ***Raspberry jam***
>
> *Mix 2 kg 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]

2.4 ÷ 2 = 1.2 kg of sugar per kg of raspberries.

1.2 × 3.5 = 4.2 kg of sugar needed for 3.5kg of raspberries.

4.2 − 4 = 0.2 kg more sugar needed

= 200 g

Answer 200 grams

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END OF QUESTIONS