



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

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	
<b>TOTAL</b>	

#### 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.



N 0 V 2 1 8 3 6 2 1 0 1

IB/H/Nov21/E5

8362/1

QAN 603/4258/4



PASS  
FUNCTIONAL  
SKILLS

# FUNCTIONAL SKILLS ONLINE COURSES

The screenshot shows the platform's initial assessment section. It includes two main boxes: 'Functional Skills English Initial Assessment' (with 13 questions and no time limit) and 'Functional Skills Maths Initial Assessment' (with 25 questions, no time limit, and a mixed calculator option). Each box has a 'Start Initial Assessment' button. Below these are 'Recommendations' and a 'Suggested courses' section. The 'Functional Skills Maths Level 2' course is highlighted, showing 35 topic counts, 105 tests, and 43 mock exams. Other courses listed are 'Functional Skills English Level 2' and 'Functional Skills Maths Level 1'.

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

The screenshot shows the 'Course Completion %' section with a completion percentage of 6.44% and a progress bar. Below it is a 'Using Numbers' section showing 16 topics and 27.08% completion, with a 'Start Learning' button. At the bottom, there's a table for 'Previous Results for Addition and Subtraction (including)' with two rows: one for an attempt on 25/04/2022 at 15:39 with an easy difficulty and 80% result, and another for 18/01/2022 at 14:01 with a medium difficulty and 20% result.

- ✓ 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

The screenshot shows a math practice question titled 'Why do we write?'. It asks: 'Some students were asked about the number of hours they spent per week studying. Their answers are listed below. How many students had 10 hours or more? Give your answer to 1 decimal place.' Below the question is a diagram of a trapezoid with a dashed line from the top vertex to the bottom base, dividing it into two triangles. The question asks for the total area of the trapezoid using the formula  $A = \frac{1}{2} (h + b) \times w$ . The correct answer is 11.1. The page also includes a 'Practice Question 1 of 6' section with a calculator and a 'Select Practice Question Difficulty' dropdown.

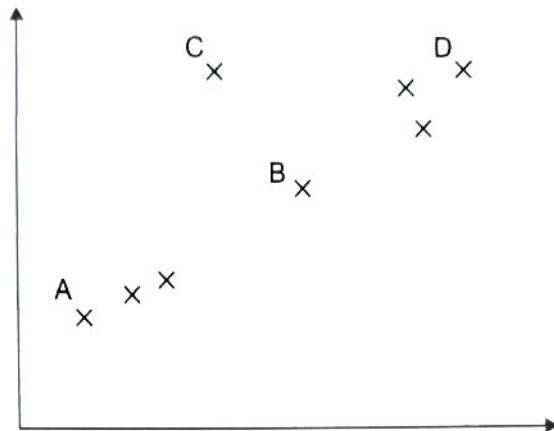
- ✓ See your progress through as you progress through each topic area
- ✓ Get your average scores for practice questions, topic tests and mock exams
- ✓ View all practice question, topic test and mock exam attempts over time
- ✓ View historical attempts to analyse your progress over time

Or visit  
**passfunctionalskills.co.uk**

## Section A

Do not write  
outside the  
boxAnswer **all** questions in the spaces provided.

1 Here is a scatter diagram.



Four of the points are labelled.

Which one of these points is an outlier?

Circle your answer.

[1 mark]

A

B

C

D

2 Work out  $942795 - 350823$

[1 mark]

$$\begin{array}{r} 942795 \\ - 350823 \\ \hline 591972 \end{array}$$

Answer

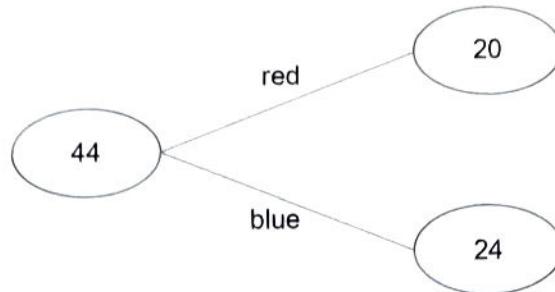
591972



0 2

3 The frequency tree shows information about the colour of 44 items.  
One of the items is chosen at random.

Do not write  
outside the  
box



Work out the probability that the item is **blue**.

Give your answer as a fraction in its simplest form.

**[2 marks]**

Total = 44

Answer  $\frac{24}{44}$

4 Work out 19% of 150

**[2 marks]**

$10\% \text{ of } 150 = 15$

$1\% \text{ of } 150 = 1.5$

$9\% \text{ of } 150 = 13.5$

$19\% = 15 + 13.5 = 28.5$

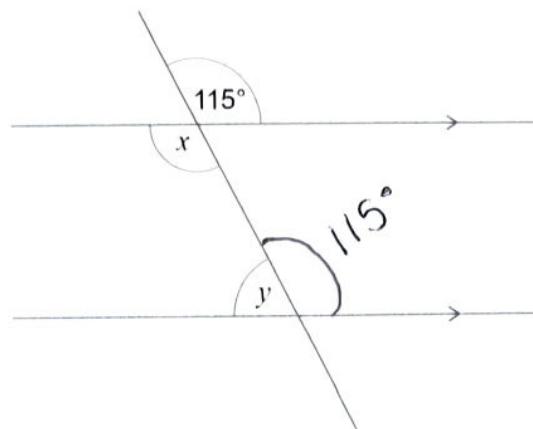
Answer  $28.5$

Turn over ►



0 3

5

Not drawn  
accuratelyDo not write  
outside the  
boxWork out the size of angle  $x$  and the size of angle  $y$ .

[2 marks]

$$y = 180 - 115 = 65^\circ$$

$$x = 115^\circ$$

$$x = 115^\circ$$

$$y = 65^\circ$$

8



0 4

## Section B

Do not write  
outside the  
boxAnswer **all** questions in the spaces provided.

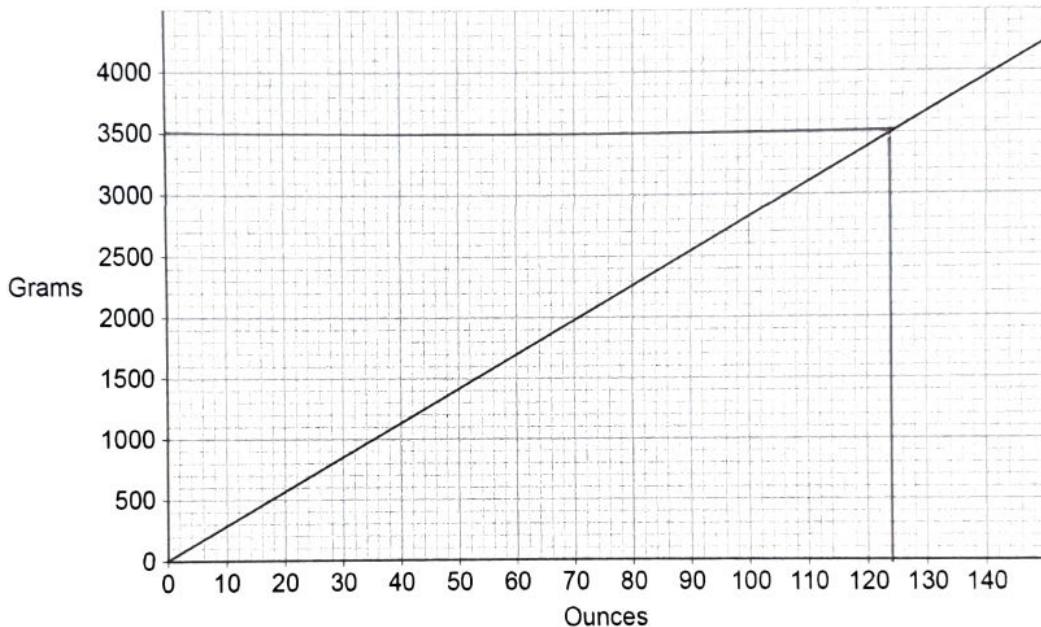
6

**Baby**

Jo has a baby.

She calls the baby Ella.

6 (a) The graph can be used to convert between grams and ounces.



At birth, Ella weighed 3.5 kg

Did Ella weigh **more than** 8 pounds?

Use 1 pound = 16 ounces

You **must** show your working.

[4 marks]

$$3.5 \text{ kg} = 3500 \text{ g} = 124 \text{ ounces}$$

$$1 \text{ pound} = 16 \text{ ounces}$$

$$7.75 \text{ pounds} = 124 \text{ ounces}$$

No, not more than  
8 pounds

Question 6 continues on the next page

Turn over ►



6 (b) Here are the birth weights of 7 other babies born on the same day as Ella.

Do not write outside the box

Weight (kg)	2.3	2.5	2.7	3.6	4	4	4
-------------	-----	-----	-----	-----	---	---	---

Jo's mum says,

"Ella's weight of 3.5 kg is more than the average weight of the other 7 babies."

Jo says,

"It depends on which type of average you use."

Show that Jo is correct.

[4 marks]

$$\begin{aligned}\text{mean} &= 2.3 + 2.5 + 2.7 + 3.6 + 4 + 4 + 4 \\ &= 23.1 \div 7 = 3.3\end{aligned}$$

$$\text{median} = 3.6$$

$$\text{mode} = 4$$

Yes it depends on the type of average used



6 (c) Jo sees this special offer on a pack of nappies.

Do not write outside the box



Jo normally buys nappies that cost 21p each.

How much will Jo save **per nappy** by buying this pack?

You **must** show your working.

[4 marks]

$$25 \text{ nappies} = 6.75 \div 3 = 2.25$$

$$6.75 - 2.25 = 4.5$$

£4.50 per 25 nappies

$$4.5 \div 25 = 0.18$$

£0.18 per nappy

$$\text{saves } 0.21 - 0.18 = 0.03$$

$$= 3p$$

Answer

3

p

12

**END OF QUESTIONS**



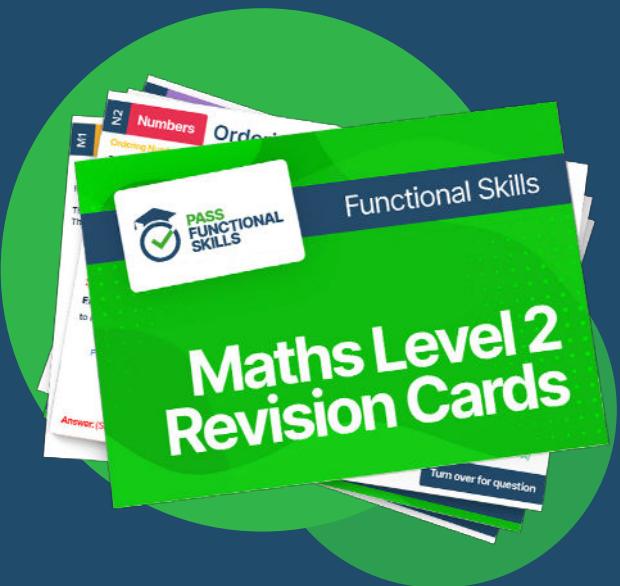
0 7



**PASS  
FUNCTIONAL  
SKILLS**



Functional Skills Maths  
Level 2 Practice Papers



Functional Skills Maths  
Level 2 Revision Cards



Functional Skills English Level 2  
Practice Papers & Revision Cards



Functional Skills Maths  
Level 2 Pocket Revision Guide

Or visit  
**passfunctionalskills.co.uk**