



## NCFE Level 2 Functional Skills Qualification in Mathematics (603/5060/X)

Paper number: P001260  
 Section A: Non-calculator Test



Time allowed: 30 minutes

### Learner instructions

- Answer all questions.
- Read each question carefully.
- Write your answers in the spaces provided.
- Show your working, as marks may be awarded for working.
- State units in your answers, where appropriate.
- Check your work.

### Learner information

- Section A contains **Activity 1** only.
- The maximum mark for this section is **15**.
- The marks available for each question are shown in brackets.

### Resources

You will need a:

- pen, with black or blue ink
- pencil and eraser
- 30 cm ruler
- protractor.

To be completed by the examiner		Mark
A	Activity 1	/ 15
B	Activity 2	/ 15
	Activity 3	/ 15
	Activity 4	/ 15
	<b>TOTAL MARK</b>	/ 60

If extra pages are used, please make sure your name and centre name are on them and they are securely fastened to this booklet.

**Please complete the details below clearly and in BLOCK CAPITALS.**

Learner name

\_\_\_\_\_

Centre name

\_\_\_\_\_

Learner number

\_\_\_\_\_

Centre number

\_\_\_\_\_

**Do not turn over until the invigilator tells you to do so.**



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# FUNCTIONAL SKILLS ONLINE COURSES

Functional Skills English Initial Assessment  
English

Functional Skills Maths Initial Assessment  
Maths

Recommendations

Based on your results from this initial assessment, we estimate you are currently at **Level 1.5**. From this diagnostic, we think one of the following courses would be suitable:

- Functional Skills Maths Level 2**
  - 35 Topic Count
  - 105 Tests
  - 43 Mock Exams

**Start Initial Assessment**

**Start Initial Assessment**

**Enrol Now**

**Pick my own**

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

Course Completion %

View the completion percentage for the course.

6.44%

Previous Results for Addition and Subtraction (including)

ATTEMPT DATE	DIFFICULTY	RESULT
25/04/2022 15:39	Easy	80%
18/01/2022 14:01	Medium	20%

**Using Numbers**  
16 TOPICS  
27.08% Complete

**Start Learning**

- ✓ 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

Topic: Addition and Subtraction (including decimal) Topic Test Instructions

Question 2 of 6

1. 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.

8.8, 12.8, 15.4, 8.9, 21.3

2. Calculate the area of the shaded region.

For draw a line from the origin to the point (4, 0) and draw a line from the point (4, 0) to the point (0, 3). The area is shaded.

Calculate the total area of the shaded region to 2 decimal places.

179  
180  
181  
182

**Start Topic Test**

- ✓ 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**

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## Activity 1: Knitting

1 (a) Joti works in a knitting shop.  
The shop sells knitting charts like the one below.

Knitting is made from rows of stitches.

The symbols in the chart tell knitters what type of stitch to use.

The chart is a coordinate grid.

Tick the symbol which is in stitch 5, row 13.

Your answer:

[1 mark]

0

1

1

1

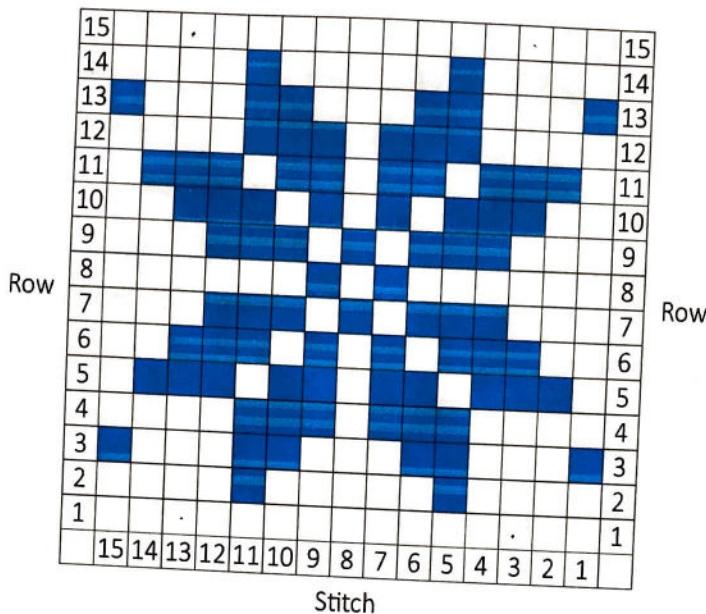
3

**Please turn over**



1 (b)

Here is a different knitting chart.



This chart tells knitters what colour wool to use for each stitch in the pattern.

Joti changes the chart.

She adds four more blue stiches to give the pattern four lines of symmetry.

Write down the coordinates of the four blue stitches Joti adds.

[2 marks]

Your answer:

Stitch	3	Row	1
Stitch	3	Row	15
Stitch	13	Row	1
Stitch	13	Row	15

1 (c)

Gavin goes to Joti's shop.

He is making a circular blanket.

The finished blanket will have a radius of 0.325 m

It will have ribbon all around the edge.

He thinks he will need 2.5 m of ribbon.

Gavin knows that  $\pi$  is about 3.1416



Round  $\pi$  to 1 decimal place and use this value to work out how much ribbon Gavin will have left if he buys 2.5 m

[4 marks]

$$\pi \approx 3.1$$

$$2 \times 3.1 \times 0.325 = 2.015 \text{ m}$$

$$2.5 - 2.015 = 0.485 \text{ m}$$

Your answer:

0.485

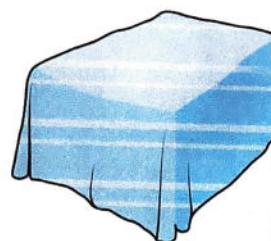
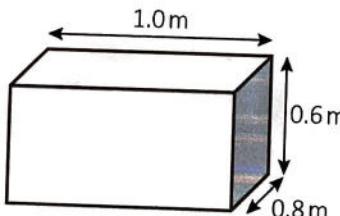
m



1 (d)

Sheba also goes to Joti's shop.

She is knitting a rectangular cover for a large storage box.



Calculate the length and width of the cover required to cover the box, as shown in the diagram.

[2 marks]

$$1 + 0.6 + 0.6 = 2.2 \text{ m}.$$

$$0.8 + 0.6 + 0.6 = 2.0 \text{ m}.$$

Your answer:

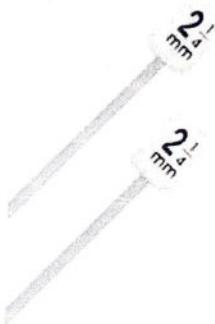
2.2, 2.0 m

1 (e)

Knitting needles are long, thin cylinders with a point at one or both ends.

The size of a knitting needle is the diameter of the cylinder in mm

For example, these needles have a diameter of  $2\frac{1}{4}$  mm



Calculate the difference in diameter between  $6\frac{1}{2}$  mm needles and  $3\frac{3}{4}$  mm needles.

Give your answer as a mixed number.

[1 mark]

$$6\frac{1}{2} = \frac{13}{2} = \frac{26}{4}, \quad 3\frac{3}{4} = \frac{15}{4}$$

$$\frac{26}{4} - \frac{15}{4} = \frac{11}{4} = 2\frac{3}{4}$$

Your answer:

$2\frac{3}{4}$  mm



1 (f)

The old world record for the longest knitting needles was 3.98 m

The new world record is 11% longer.

What is the new world record for the longest knitting needles?



Give your answer in m

[2 marks]

$$3.98 \text{ m} \times 1.11 = 4.4178 \text{ m}$$

Your answer:

4.4178 m

1 (g)

The relative thickness of wool can be described using improper fractions.  
Put these improper fractions in order of size, starting with the smallest.

$$\frac{3}{2}, \frac{7}{4}, \frac{5}{3}$$

[2 marks]

1.5, 1.75, 1.66

Your answer:

$$\frac{3}{2}, \frac{5}{3}, \frac{7}{4}$$

1 (h)

Joti and her friends knit squares to make patchwork blankets.

It takes 4 people 20 days to knit enough squares for one blanket.

How long would it take 8 people if they knit at the same rate?



[1 mark]

~~4 x 20~~  

$$\frac{4 \times 20}{8} =$$

Your answer:

10 days

[Total marks: 15]

This is the end of Section A.



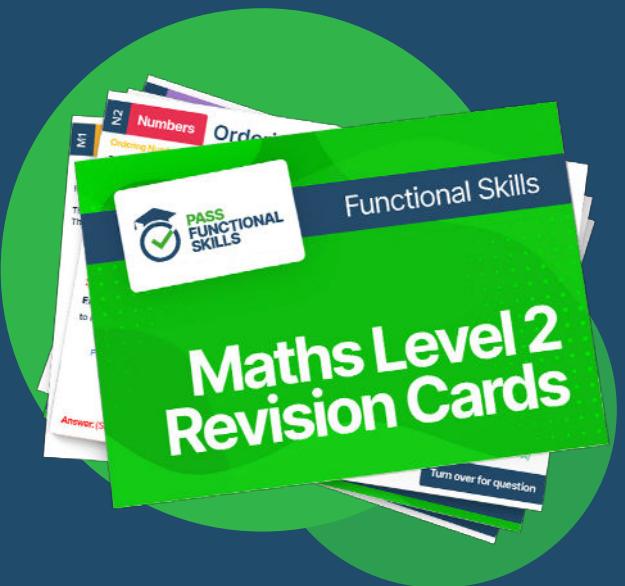
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