

Mathematics

Level 1

Section A (Non – Calculator)



Functional Skills Mock 6

Paper Reference(s)

Time: 10 minutes

XXXX/XX

You must have:

Pen, HB pencil, eraser, ruler graduated in cm and mm, protractor, compasses.

My signature confirms that I will not discuss the content of the test with anyone.

Signature: _____

Instructions

- Use a **black** ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Sign the declaration.
- Answer **all** questions.
- Write your final answers in the boxes provided
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You **must** show clearly how you get your answers in the spaces provided. Marks will be awarded for your working out.
- Check your working and your answers at each stage.
- Diagrams are **not** accurately drawn, unless otherwise indicated.
- **Calculators may not be used**
- Take the value of π to be 3.14

Information

- The total mark for this section is **6**
- The marks for each question are shown in brackets
 - *use this as a guide to how much time to spend on each question.*
- This sign shows where marks will be awarded for showing your checks.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.

1

(a) Calculate 12^2

(1)

(b) Work out $80 - 6 \times 2$

(1)

(c) Work out $-18 - 14$

(1)

Total for Question 1 is 3 marks

2 Rosa makes candles to sell.

Each candle is in the shape of a cuboid of height 12cm

The base of each candle is a square of perimeter 16cm

Rosa needs to know the volume of one candle.

Work out the volume of one candle.
Remember to give units with your answer.

(2)



(b) Use reverse calculations to show a check of your answer.

(1)

Total for Question 2 is 3 marks

SECTION A: Rowing

Answer all questions in this section.

Write your answers in the spaces provided.

- 1 Luke is a member of a rowing club.
The rowing club organises a charity event using indoor rowing machines.

The table shows the time it took Luke to row 10km in 6 training sessions.

Time taken (minutes)	54	52	47	51	45	42
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Luke can enter the rowing event if his mean time to row 10km is less than 50 minutes.

- (a) Is his mean time to row 10km less than 50 minutes?
Show a check of your working.

(4)

Use the box below to show clearly how you get your answer.

Use the box below to show your check.



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Mathematics

Level 1

Section B (Calculator)



Sample assessment material for first teaching
September 2019

Time: 50 minutes

Paper Reference(s)

XXXX/XX

You must have:

Pen, calculator, HB pencil, eraser, ruler graduated in cm and mm, protractor, a pair of compasses.

My signature confirms that I will not discuss the content of the test with anyone.

Signature: _____

Instructions

- Use a black ball-point pen.
- Fill in the boxes at the top of this page with your name, centre number and candidate number.
- Sign the declaration.
- Answer all questions.
- Write your final answers in the boxes provided
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You **must** show clearly how you get your answers in the spaces provided. Marks will be awarded for your working out.
- Check your working and your answers at each stage.
- Diagrams are **not** accurately drawn, unless otherwise indicated.
- If your calculator does not have a π button take the value of π to be 3.14

Information

- The total mark for this section is 26
- The marks for each question are shown in brackets
 - *use this as a guide to how much time to spend on each question.*
- This sign shows where marks will be awarded for showing your checks.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.

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Teams take part in the rowing event.
Each team must row a total distance of 67 miles.

The indoor rowing machines show the distance rowed in kilometres (km).

Luke uses this rule to change miles into km.



Luke thinks 67 miles is the same distance as 110 km.

(b) Is Luke correct?
Show why you think this.

(3)

Use the box below to show clearly how you get your answer.

(Total for Question 1 is 7 marks)

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- 2 Luke wants to make some snacks for the rowing event.
He has these lists of ingredients.

Energy bars
(makes 8 bars)

1 tbsp oil
3 bananas
1 tbsp honey
1 tbsp peanut butter
280g oats
2 tbsp mixed seeds

Smoothie
(each)

1 banana
300ml skimmed milk
30g oats
100g plain yoghurt
140g mixed berries

Luke has 2kg of oats.
He will make 4 smoothies.

Luke also wants to make 50 energy bars to sell at the event.

Does Luke have enough oats to make 4 smoothies and 50 energy bars?

(5)

Use the box below to show clearly how you get your answer.

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- 3 The table shows the amount of money collected by each team for the rowing event.

Team	Amount collected
A	£2347
B	£3862
C	£3581
D	£1954

Luke was in team A.
He says

Team A collected $\frac{1}{5}$ of the total amount.

(a) Is $\frac{1}{5}$ of the total amount of money collected £2347?

(3)

Use the box below to show clearly how you get your answer.

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SECTION B: Keeping rabbits

Answer all questions in this section.

Write your answers in the spaces provided.

- 4 Ben wants to keep rabbits in his garden.
The rabbits will live in a rabbit run and hutch.

Ben wants to have 2 rabbits.

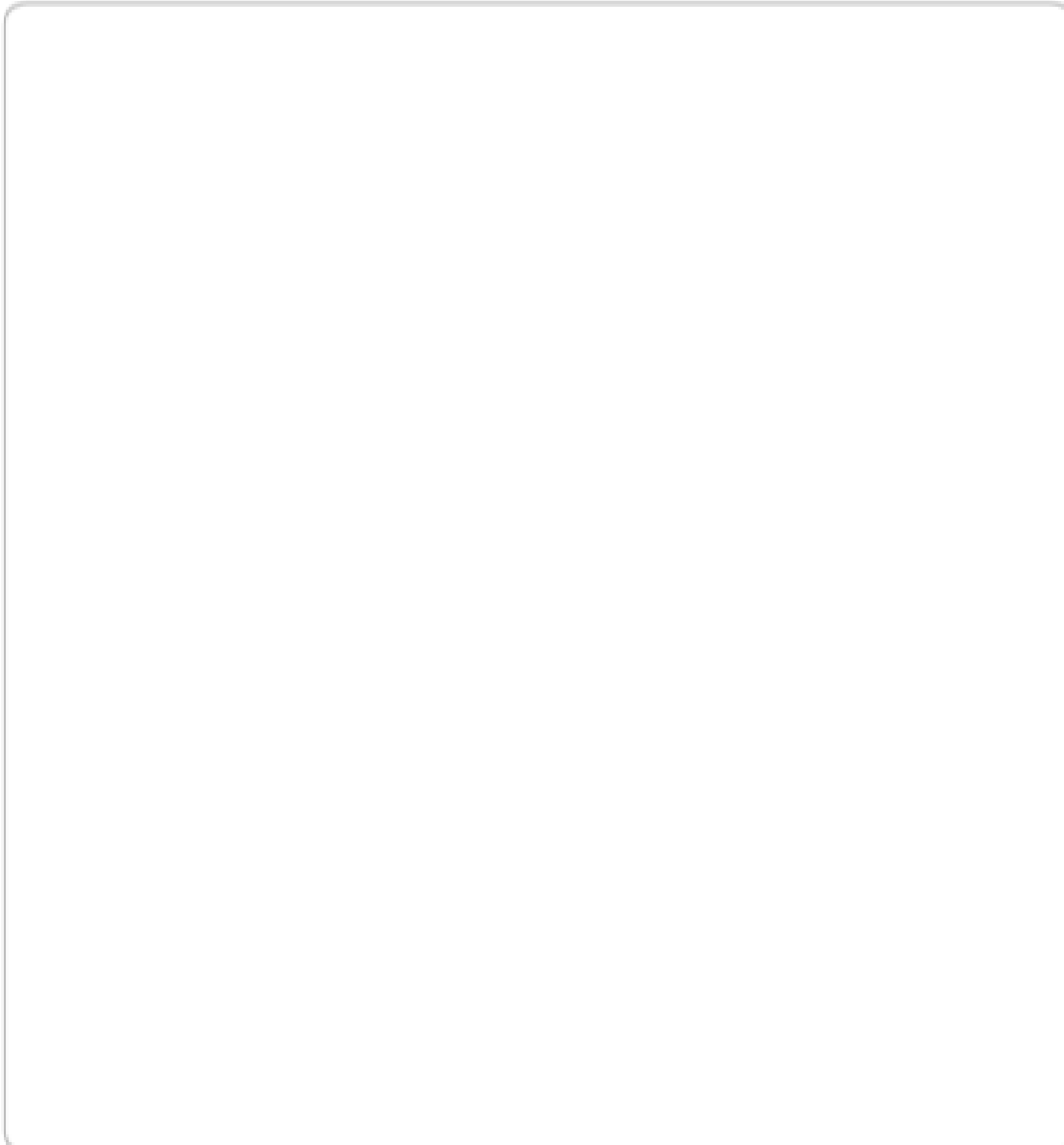
He knows that each rabbit needs a floor space of 4500 cm^2

Ben has a hutch with a floor space of 9500 cm^2

- (a) Is this floor space big enough for 2 rabbits?
Show why you think this.

(2)

Use the box below to show clearly how you get your answer.

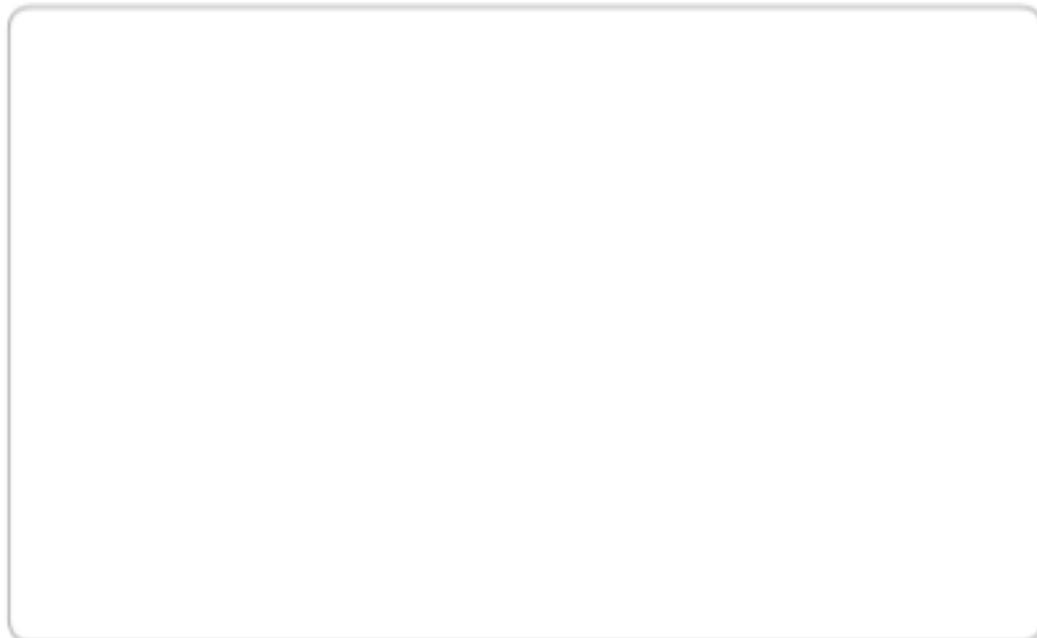


Ben has a lawn in his garden.
The lawn is in the shape of a rectangle 6 m by 5 m.

(b) What is the area of the lawn?

(2)

Use the box below to show clearly how you get your answer.



(Total for Question 4 is 4 marks)

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5 Ben wants to put the rabbit run and hutch on his lawn.

The space for the rabbit run must

- be square 350 cm by 350 cm
- have at least 50 cm space to walk around it.

The space for the rabbit hutch must be

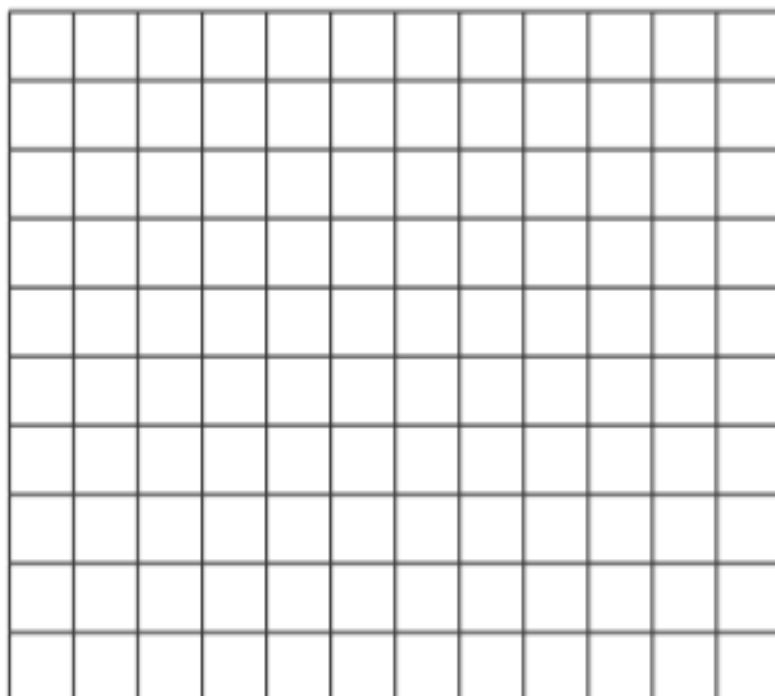
- rectangular 200 cm by 50 cm.

The rabbit hutch will be in a corner inside the rabbit run.

The grid below is a plan of the lawn.

- (a) Draw a space for the rabbit run and the rabbit hutch on the grid.
Remember to use the key.

(4)



Key: 1 square on the grid is 50 cm by 50 cm on the lawn

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6) George has these two options for contact lenses.

Option A
£108 for 90 pairs

Option B
£1.15 each pair

George wants to buy 90 pairs of contact lenses.
He wants to pay as little as possible.

(b) Which option should George use?
Show a check of your working.

(3)

Use the box below to show clearly how you get your answer.

Use the box below to show your check.



(Total for Question 8 is 4 marks)