



**GCSE**

**3310U10 – 1**

**THURSDAY, 8 MAY 2025 – MORNING**

**MATHEMATICS – NUMERACY  
UNIT 1: NON – CALCULATOR  
FOUNDATION TIER**

**1 hour 30 minutes plus your additional time  
allowance**

**THE USE OF A CALCULATOR IS NOT  
PERMITTED IN THIS EXAMINATION**

**Surname:** \_\_\_\_\_

**First name(s):** \_\_\_\_\_

**Centre Number:** \_\_\_\_\_

**Candidate Number:** 0 \_\_\_\_\_

**For Examiner's use only**

| <b>Question</b> | <b>Maximum Mark</b> | <b>Mark Awarded</b> |
|-----------------|---------------------|---------------------|
| <b>1.</b>       | <b>7</b>            |                     |
| <b>2.</b>       | <b>10</b>           |                     |
| <b>3.</b>       | <b>5</b>            |                     |
| <b>4.</b>       | <b>10</b>           |                     |
| <b>5.</b>       | <b>5</b>            |                     |
| <b>6.</b>       | <b>11</b>           |                     |
| <b>7.</b>       | <b>3</b>            |                     |
| <b>8.</b>       | <b>3</b>            |                     |
| <b>9.</b>       | <b>7</b>            |                     |
| <b>10.</b>      | <b>4</b>            |                     |
| <b>Total</b>    | <b>65</b>           |                     |

### **ADDITIONAL MATERIALS**

A ruler, protractor and pair of compasses may be required.

### **ITEMS INCLUDED WITH QUESTION PAPER**

A separate Formula List.

A separate Diagram Booklet.

Models for Question 3 (a) and Question 6 (c).

The Diagram Booklet **MUST** be handed in to the invigilators and sent for marking.

### **INSTRUCTIONS TO CANDIDATES**

Use black ink, black ball–point pen, black felt tip or your usual method.

Write your name, centre number and candidate number in the spaces on the front cover.

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

If you run out of space, use the additional page(s) at the back of this booklet. Question numbers must be given for all work written on the additional page(s).

Take  $\pi$  as  $3 \cdot 14$

(Turn over)

**INFORMATION FOR CANDIDATES**

**You should give details of your method of solution when appropriate.**

**Unless stated, diagrams are not drawn to scale.**

**Scale drawing solutions will not be acceptable where you are asked to calculate.**

**The number of marks is given in brackets at the end of each question or part – question.**

**In question 4, the assessment will take into account the quality of your linguistic and mathematical organisation, communication and accuracy in writing.**

**(Turn over)**

1. Dafydd was celebrating his birthday.  
He asked his friends to choose one activity.  
They could choose cinema, trampolining or bowling.

Look at the table for Question 1 in the separate  
Diagram Booklet. The table shows the results.

- (a) Dafydd says,  
“Cinema is more popular  
than trampolining.”

Is Dafydd correct?

You must show working to support your answer.

Yes ☐ No ☐

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[1 mark]

continued on the next page . . .

(Turn over)

**Question 1 continued**

1. (b) **15** of Dafydd's friends said they preferred bowling.

**How many of Dafydd's friends were there altogether?**

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**[1 mark]**

**continued on the next page . . .**

**(Turn over)**

**Question 1 continued**

1. (c) Dafydd and his friends decide to take the train from Briton Ferry to Cardiff.

Dafydd finds the following information on the internet.

|                     |                |              |
|---------------------|----------------|--------------|
| <b>Briton Ferry</b> | <b>Departs</b> | <b>17:31</b> |
| <b>Cardiff</b>      | <b>Arrives</b> | <b>18:19</b> |

**How many minutes will the journey take?**

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**[2 marks]**

**continued on the next page . . .**

**(Turn over)**

**Question 1 continued**

1. (d) **20** people go bowling on Dafydd's birthday.  
The cost is **£10.50** per person.

They pay using the following offer.

**Pay full price for 1 person and  
the second person pays half price.**

How much will it cost the **20** people to go  
bowling using this offer?

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**(Turn over)**

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**[3 marks]**

**(Turn over)**

2. (a) Look at the diagram for Question 2 (a) in the separate Diagram Booklet. The diagram is a chart.

Local authorities in Wales recycle household waste.

The chart shows the percentages of waste that some local authorities recycled in **2021** and **2022**.

- (i) How many of these local authorities recycled a greater percentage of waste in **2022** than they recycled in **2021**?

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[1 mark]

continued on the next page . . .

(Turn over)

**Question 2 (a) continued**

- 2. (a) (ii) In 2022, four of the local authorities recycled 70% or more of their household waste.**

**Name these four local authorities.**

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**[2 marks]**

**continued on the next page . . .**

**(Turn over)**

**Question 2 (a) continued****2. (a) (iii) In 2022:**

- **65•2% of household waste was recycled in Wales**
- **59•7% of household waste was recycled in Caerphilly.**

**Calculate the difference between these two percentages.**

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**[2 marks]****continued on the next page . . .****(Turn over)**

**Question 2 continued**

2. (b) Look at the diagram for Question 2 (b) in the separate Diagram Booklet. The diagram is a bar chart. The bar chart shows the percentage of waste recycled in the UK in **2020**.

Write down **TWO** things that are wrong with the bar chart.

1. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**[2 marks]**

**continued on the next page . . .**

**(Turn over)**

**Question 2 continued**

- 2. (c) Look at Diagram 1 for Question 2 (c) in the separate Diagram Booklet. The diagram is NOT drawn to scale. The diagram shows a square tile and a rectangular tile.**

**Kristian tries to recycle as much as possible. He had some spare square and rectangular tiles, as shown in the diagram.**

**Rather than replace his garden table, Kristian used his spare tiles to tile the top of the table. Look at Diagram 2 for Question 2 (c) in the separate Diagram Booklet. The diagram is NOT drawn to scale. The diagram shows Kristian's tiled table top.**

**Kristian wants to put a border around the perimeter of the table.**

**What length of border will he need?**

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**(Turn over)**

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**[3 marks]**

3. Ellie wants to decorate her living room.

(a) She sees paint that she likes in her local DIY shop.

The paint is sold in **2 – litre** tins and **8 – litre** tins.

Ask for the models for Question 3 (a).

The models are NOT made to scale.

Model **X** represents the **2 – litre** tin of paint.

Model **Y** represents the **8 – litre** tin of paint.

Tin **X** costs **£9**

Tin **Y** costs **£40**

(i) Which size tin of paint is the better value?

You must show all your working.

2 litres       8 litres

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(Turn over)

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[2 marks]

3. (a) (ii) What is the name given to the **3D** shape that best represents the tins of paint.

Circle your answer.

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|----------|
| Sphere   |
| Cylinder |
| Cube     |
| Cone     |
| Cuboid   |

[1 mark]

continued on the next page . . .

(Turn over)

**Question 3 continued**

- 3. (b) Ellie pays a decorator to paint her living room.**

**Look at the formula for Question 3 (b) in the separate Diagram Booklet.**

**The decorator uses this formula to calculate the total cost.**

**The decorator takes 7 hours to paint Ellie's living room.**

**How much does Ellie pay?**

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**[2 marks]**

**(Turn over)**

4. IN THIS QUESTION, YOU WILL BE ASSESSED ON THE QUALITY OF YOUR ORGANISATION, COMMUNICATION AND ACCURACY IN WRITING.

Angharad has a food truck.

She sells hotdogs at festivals.

Each hotdog consists of a bread roll and a sausage.

Look at the table for Question 4 in the separate Diagram Booklet. The table shows Angharad's costs for a festival last month.

Angharad bought enough bread rolls and sausages to make 300 hotdogs.

She sold all the hotdogs for £5 each.

What was Angharad's total profit?

You must show all your working.

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(Turn over)

**(Turn over)**

5. Look at the diagram for Question 5 in the separate Diagram Booklet. The diagram shows a conversion graph for furlongs and yards.

Furlongs and yards are both measures of length. In the past, these measures were used in farming. The conversion graph can be used to convert between furlongs and yards.

Complete each of the following statements.

- (a) 330 yards is equal to \_\_\_\_\_ furlongs.

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[1 mark]

- (b) 7 furlongs is equal to \_\_\_\_\_ yards.

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[2 marks]

continued on the next page . . .

(Turn over)

**Question 5 continued**

**5. (c) 1320 yards is equal to \_\_\_\_\_  
furlongs.**

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**[2 marks]**

**(Turn over)**

**6. Viktor is a farmer.**

**(a) Viktor wants to buy some animal feed for his sheep.**

**Look at the information for Question 6 (a) in the separate Diagram Booklet.**

**He can EITHER buy a bag of Sean Sheep Mix OR a bag of Rugged Sheep Mix.**

**Which of these two animal feeds is cheaper and by how much?**

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**(Turn over)**

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\_\_\_\_\_ Sheep Mix is cheaper

It is cheaper by £ \_\_\_\_\_

[5 marks]

continued on the next page . . .

(Turn over)

**Question 6 continued**

- 6. (b) Viktor sells butter and ice cream in his farm shop.  
He sells his butter in 250 g packets.  
Each packet costs £3.25**

**Sioned buys 500 g of butter and 1.5 litres of  
ice cream.**

**She pays a total of £18.50 for the butter and the  
ice cream.**

**Calculate the cost of 1 litre of ice cream.**

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**(Turn over)**

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**1 litre of ice cream costs £ \_\_\_\_\_**

**[4 marks]**

**continued on the next page . . .**

**(Turn over)**

**Question 6 continued**

6. (c) Ask for the model for Question 6 (c). The model is NOT made to scale. The model represents a water trough.

Viktor orders a new water trough for his cows.  
It is in the shape of a cuboid.

The internal measurements are:

length 4 m, width 0.5 m  
and height 0.8 m.

Calculate the capacity of the new water  
trough in  $\text{m}^3$

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(Turn over)

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Capacity is \_\_\_\_\_ m<sup>3</sup>

[2 marks]

(Turn over)

7. Look at the diagram for Question 7 in the separate Diagram Booklet. The diagram is a pie chart.  
The diagram IS accurately drawn.

Ralph completed a survey.

He asked people to describe where they live.

Ralph's results are shown on the accurately – drawn pie chart.

In Ralph's survey, 480 people answered  
'Town or city'.

Calculate the number of people who answered  
'Seaside' in Ralph's survey.

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(Turn over)

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**[3 marks]**

8. Look at the information for Question 8 in the separate Diagram Booklet.

A survey was carried out to find how many books children read during the holidays.

The information shows two questions that were asked in a questionnaire.

- (a) (i) Give ONE reason why Q1 was NOT a suitable question.

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[1 mark]

- (ii) Give ONE reason why Q2 was NOT a suitable question.

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[1 mark]

continued on the next page . . .

(Turn over)

**Question 8 continued**

- 8. (b) The survey was carried out by asking children as they left the library on a Saturday morning.  
Give ONE criticism of how the survey was carried out.**

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**[1 mark]**

**(Turn over)**

9. On a flight to Spain, the cabin crew started serving drinks to passengers at **11:00 a.m.**  
The flight manager recorded the length of time each passenger had to wait to be served.

Look at the diagram for Question 9 in the separate Diagram Booklet.

The diagram is a frequency diagram.

The flight manager has drawn this frequency diagram to display her findings.

She used groups of width **10 minutes**:

**$0 \leq \text{time} < 10$ ,  $10 \leq \text{time} < 20$ , and so on.**

- (a) How many passengers waited less than **10 minutes** to be served?

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[1 mark]

continued on the next page . . .

(Turn over)

**Question 9 continued**

- 9. (b) How many passengers were on this flight to Spain?**

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**[2 marks]**

**continued on the next page . . .**

**(Turn over)**

**Question 9 continued**

9. (c) What fraction of the total number of passengers had to wait **40 minutes** or more to be served a drink?

Express your answer in its simplest form.

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[2 marks]

- (d) What is the modal group of these recorded times?

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[1 mark]

continued on the next page . . .

(Turn over)

**Question 9 continued**

9. (e) The flight manager says,

**Consider the passengers who waited between 30 minutes and 40 minutes to be served.**

**If 8 of these passengers had been served 10 minutes faster, the modal group would have been different.**

**Is the flight manager correct?**

**Give a reason for your answer.**

**Yes** ☐ **No** ☐

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**[1 mark]**

**(Turn over)**

**10. Ewan keeps bees and sells jars of honey.**

**He buys two different sizes of jar for the honey.**

- An empty small jar costs 12p and can hold 200 ml of honey.**
- An empty large jar costs 20p and can hold 500 ml of honey.**

**Ewan works out how much to charge for each jar of honey, by:**

- calculating the cost of the honey in the jar**
- adding on the amount he paid for the jar.**

**For both sizes of jar, Ewan charges the SAME PRICE PER 100 ml for the honey itself.**

**Ewan charges his customers £3.40 for a 500 ml jar of honey.**

**This price is for the honey and the jar.**

**How much should Ewan charge for a 200 ml jar of honey?**

**You must show all your working.**

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**(Turn over)**



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[4 marks]

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**END OF PAPER**

**TOTAL 65 MARKS**

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**(Turn over)**

[illegible]

**(Turn over)**

[illegible]

**(Turn over)**

[illegible]



GCSE

3310U10 – 1

THURSDAY, 8 MAY 2025 – MORNING

**MATHEMATICS – NUMERACY**

**UNIT 1: NON – CALCULATOR**

**FOUNDATION TIER**

# Diagram Booklet

**The Diagram Booklet MUST be handed in  
to the invigilators and sent for marking.**

**Surname:** \_\_\_\_\_

**First name(s):** \_\_\_\_\_

**Centre Number:** \_\_\_\_\_

**Candidate Number:** 0 \_\_\_\_\_

Question 1

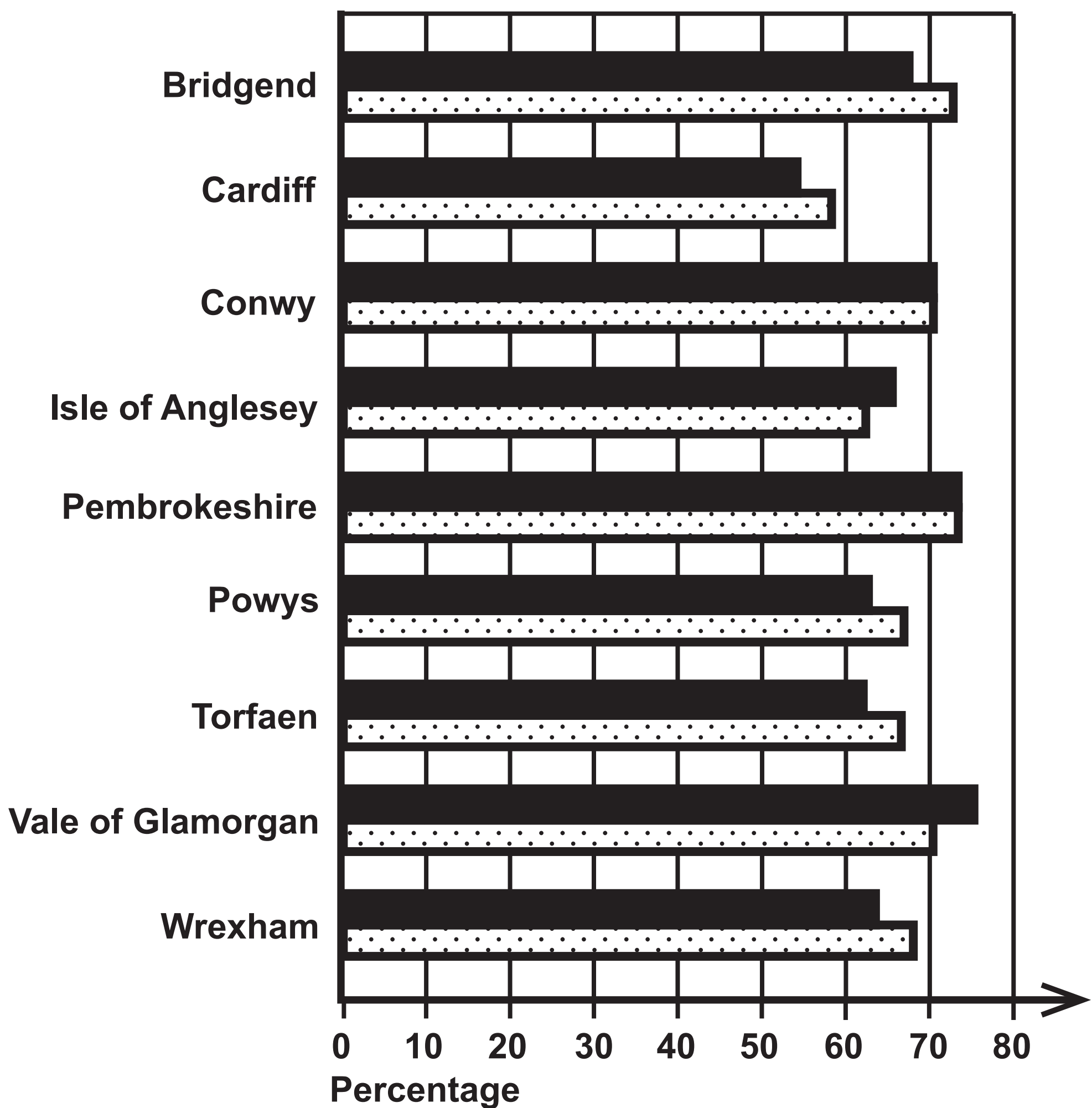
Table

|              |                               |
|--------------|-------------------------------|
| Cinema       | $\frac{3}{10}$ of his friends |
| Trampolining | 20% of his friends            |
| Bowling      | $\frac{1}{2}$ of his friends  |

## Question 2 (a)

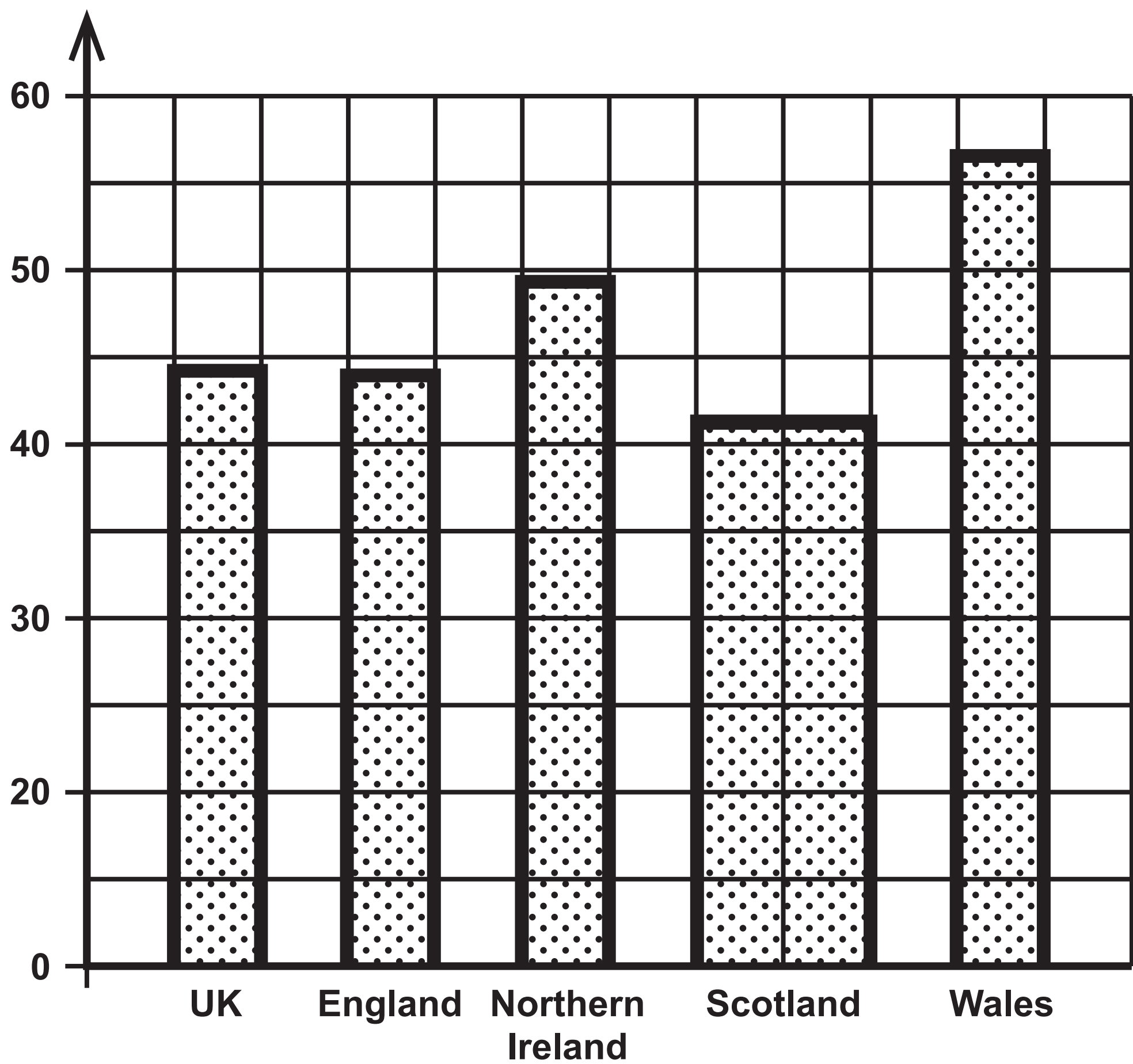
Key:  2021  2022

### Local authorities



## Question 2 (b)

Percentage of household  
waste recycled



Question 2 (c)

Diagram 1

Diagram NOT drawn to scale

Square tile

Rectangular tile

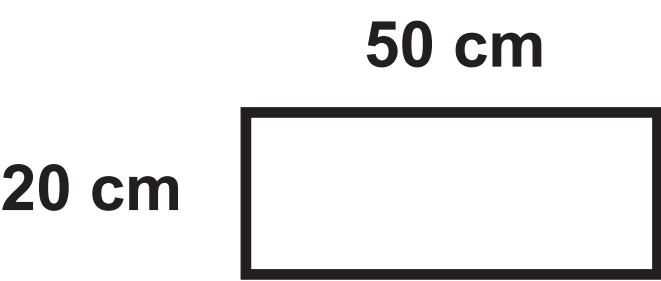
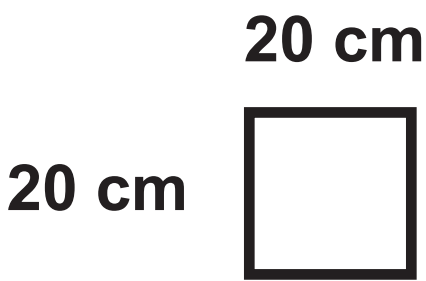
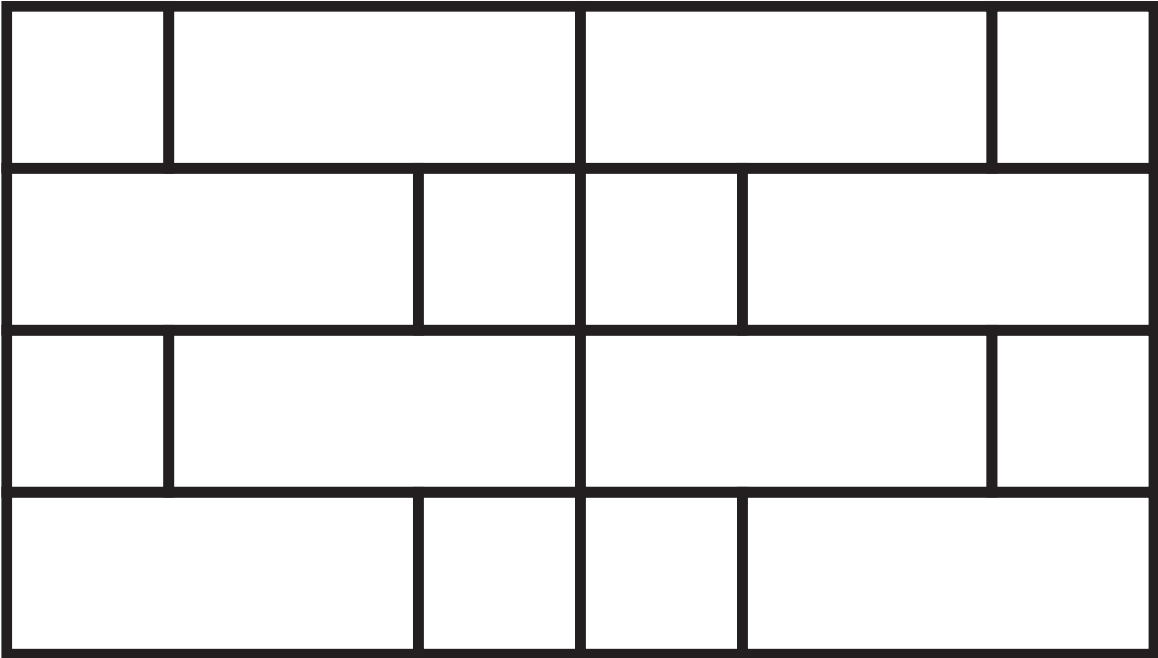


Diagram 2

Diagram NOT drawn to scale

Table top



### **Question 3 (b)**

#### **Formula**

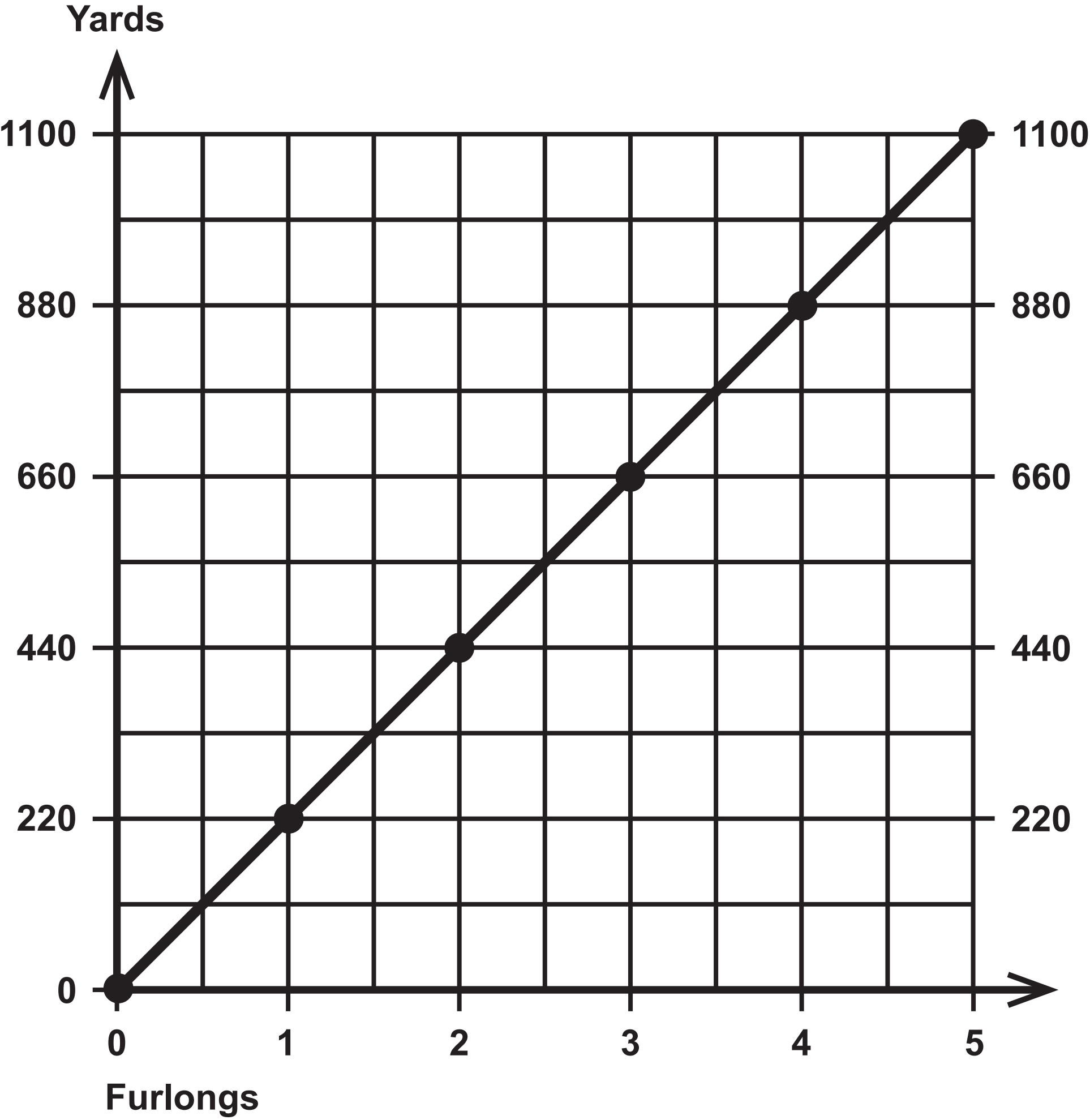
$$\text{Total cost} = \text{£}30 \times \text{number of hours} + \text{£}45$$

**Question 4**

**Table**

|                                            |                                |
|--------------------------------------------|--------------------------------|
| <b>Fees paid to the festival organiser</b> | <b>£450</b>                    |
| <b>Bread rolls</b>                         | <b>£1.50 for 6 bread rolls</b> |
| <b>Sausages</b>                            | <b>£4 for 10 sausages</b>      |

Question 5



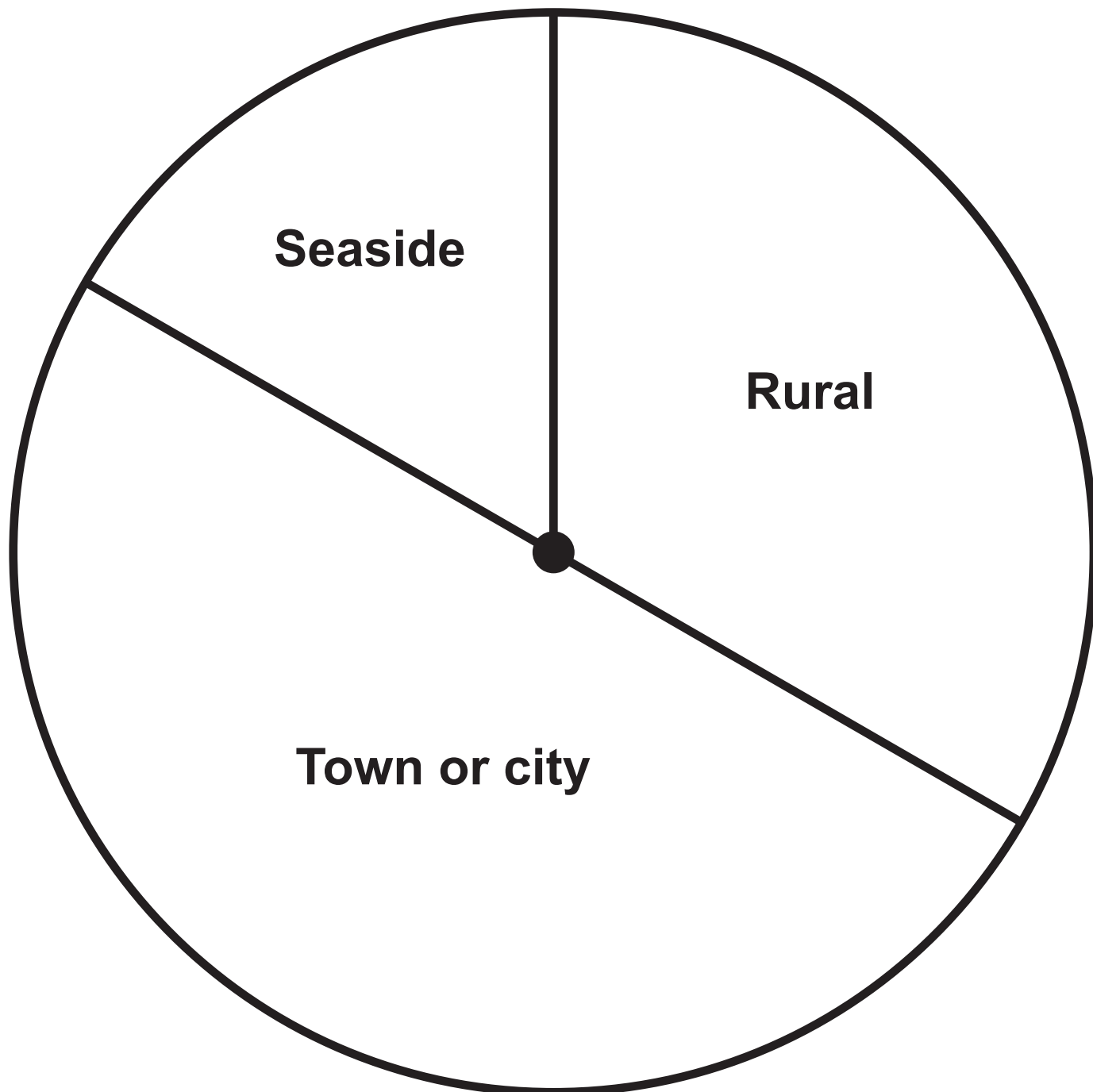
**Question 6 (a)**

**Information**

|                                                                                                     |                                                                                                                            |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <p><b>Sean<br/>Sheep<br/>Mix<br/>(20kg bag)</b></p> <p><b>Was £14</b></p> <p><b>Now 15% off</b></p> | <p><b>Rugged<br/>Sheep<br/>Mix<br/>(20kg bag)</b></p> <p><b>Was £24</b></p> <p><b>Now <math>\frac{5}{8}</math> off</b></p> |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|

## Question 7

### Results of Ralph's survey



**Question 8**

**Information**

**Q1. Most children read lots of books.**

**Do you read lots of books? \_\_\_\_\_**

**Q2. How many books do you read during the holidays?**

**None**

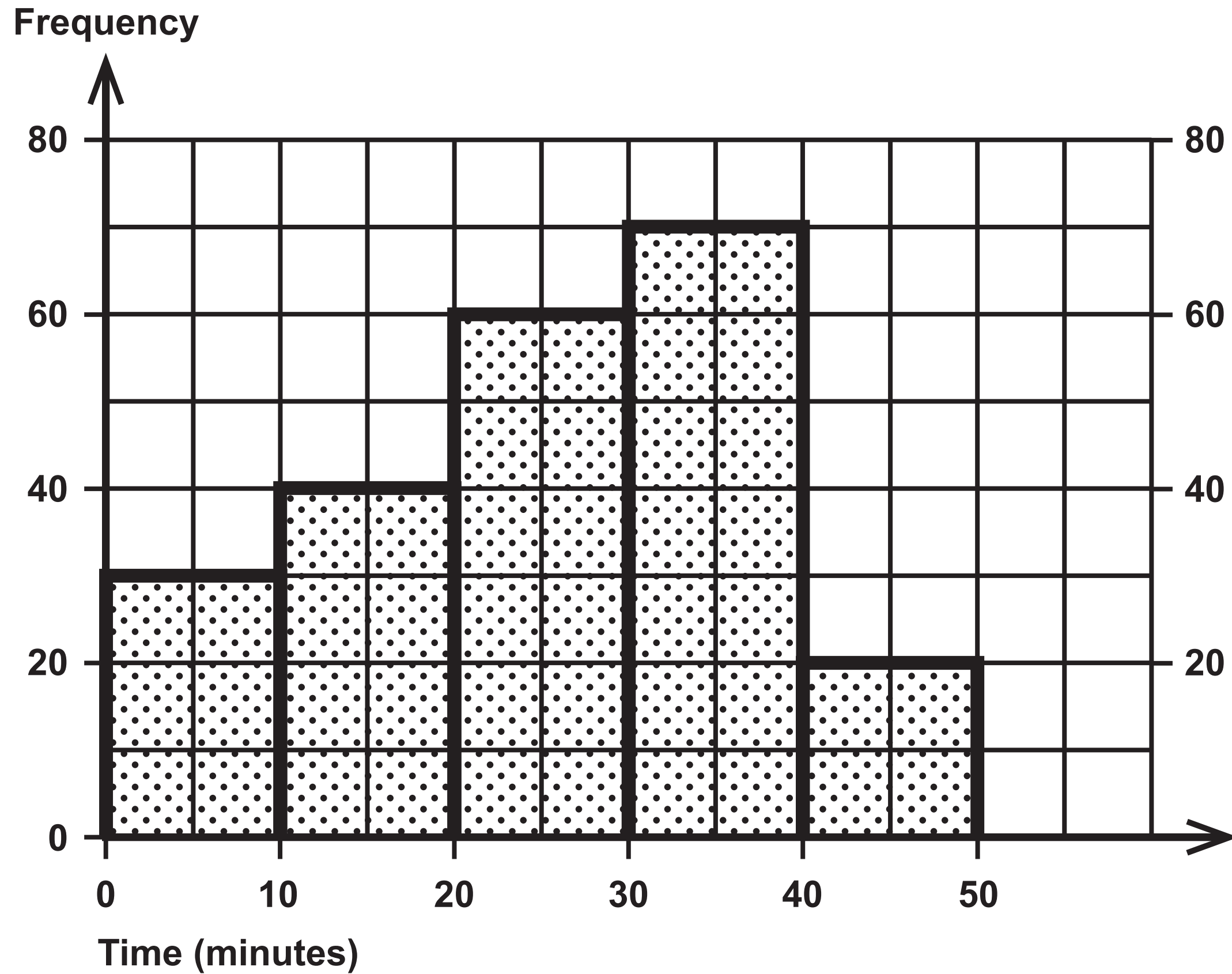
**1 – 10 books**

**10 – 20 books**

**More than 20 books**

☐☐☐☐

# Question 9



**GCSE**

**MATHEMATICS**

**and**

**GCSE**

**MATHEMATICS – NUMERACY**



**FORMULA LIST  
FOUNDATION TIER  
GCSE**

**You must not write on these formula pages.**

**Anything you write on these formula pages will gain NO credit.**

## Formula List – Foundation Tier

**Area of trapezium**  $= \frac{1}{2} (a + b) h$

