

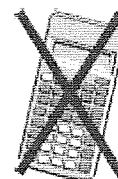
Edexcel GCSE

Mathematics (Linear) – 1MA0

QUESTIONNAIRE

Materials required for examination

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser.
Tracing paper may be used.



Instructions

Use black ink or ball-point pen.

Fill in the boxes at the top of this page with your name, centre number and candidate number.

Answer all questions.

Answer the questions in the spaces provided – there may be more space than you need.

Calculators may be used.

Information

The marks for each question are shown in brackets – use this as a guide as to how much time to spend on **each** question.

Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.

Advice

Read each question carefully before you start to answer it.

Keep an eye on the time.

Try to answer every question.

Check your answers if you have time at the end.

Notes:

1. Make sure that your questions include a TIME FRAME; e.g. Day, Week, Month...
2. Always have an option for ZERO or NONE
3. DO NOT have OVERLAPPING INTERVALS
4. Include at least 4 tick boxes
5. Your last Interval should be: More than

1. Sam wants to find out the types of film people like best.

He is going to ask whether they like comedy films or action films or science fiction films or musicals best.

- (a) Design a suitable table for a data collection sheet he could use to collect this information.

Type of film	Tally	Frequency
Comedy		
Action		
Science fiction		
Musicals		
Other		

(2)

Sam collects his data by asking 10 students in his class at school.
This might **not** be a good way to find out the types of film people like best.

- (b) Give **one** reason why.

- ① Small sample - 100 would be better
② Only asked people in class - same age/opinions

(1)

(3 marks)

2. Alison wants to find out how much time people spend reading books.
She is going to use a questionnaire.

Design a suitable question for Alison to use in her questionnaire.

How much time do you spending reading books per week?

- ☐ none
☐ 1 - 60 mins
☐ 61 - 120 mins
☐ more than 120 mins

(2 marks)

3. Pradeep wants to find out how much time people spend playing sport. He uses this question on a questionnaire.

How much time do you spend playing sport?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0 – 1 hours	1 – 2 hours	3 – 4 hours

- (a) Write down **two** things wrong with this question.

1. No time frame in question (per day/week)

2. Boxes are not exhaustive (2-3 and more than 4)

- (b) Design a better question for Pradeep's questionnaire to find out how much time people spend playing sport. (2)

How much time do you spend playing sport each week?

☐ none

☐ 1 min – 60 mins

☐ 61 min – 120 mins

☐ more

(4 marks)

4. Guy wants to find out how much time people spend watching television. He will design a questionnaire.

Design a suitable question for Guy's questionnaire.

How much TV do you watch per day?

☐ none

☐ 1 min – 60 min

☐ 61 min – 120 min

☐ more

(2 marks)

5. Paula wants to find out how much money people spend buying CDs.

She uses this question on a questionnaire.

How much money do you spend buying CDs?

☐ £10 – £30 ☐ £30 – £50 ☐ £50 – £70 ☐ more than £70

- (a) Write down **two** things wrong with this question.

1 No time frame in question

2 No box for no spending

(2)

Paula asks 100 people in a CD store to do her questionnaire.

- (b) Her sample is biased.

Explain why.

• People in a CD store more likely to spend/biased
• Would be a fairer sample away from CD store.

(1)

(3 marks)

6. The manager of a department store has made some changes.

She wants to find out what people think of these changes.

She uses this question on a questionnaire.

“What do you think of the changes in the store?”

Excellent

Very good

Good

(a) Write down what is wrong about this question.

• No negative box

• Boxes imply opinions

(1)

This is another question on the questionnaire.

“How much money do you normally spend in the store?”

A lot

Not much

(b) Write down one thing that is wrong with this question.

• People will have different opinions of these

• No time frame in question

(1)

(Total 2 marks)

7. The local council is planning to build a new swimming pool.

The councillors want to get the views of the local people.

Councillor Smith suggests taking a sample from the people who attend the local sports centre.

- (a) Explain why this would not be a good sample.

• People at sports centre already use it
• Sample should be from other places

(1)

Councillor Singh suggests taking a simple random sample of 100 people.

- (b) Describe how the council could take a simple random sample.

• Take one person from each page of phone book
• Ask people in town centre

(1)

The council decided to use a questionnaire to find out how often people would use the swimming pool.

- (c) Design a question the council could use on their questionnaire.

How often would you use the pool each week?

- ☐ none
☐ once
☐ twice
☐ more

(1)

(Total 4 marks)

8. Gordon is going to open a restaurant.
He wants to know how often people eat out at a restaurant.
He designs a questionnaire.
He uses this question on a questionnaire.

"How often do you go to a restaurant?"		
<input type="text"/>	<input type="text"/>	<input type="text"/>
Never	Sometimes	Often

- (a) Write down two things that are wrong about this question.

1. No time frame in questions
2. Answer boxes reflect on people's opinions of sometimes/often

(2)

- (b) Design a more suitable question Gordon could use to find out how often people eat out at a restaurant.

How often do you eat at a restaurant each month?

- ☐ none
- ☐ once
- ☐ twice
- ☐ more

(2)

Gordon asks his family "Do you agree that pizza is better than pasta?"

This is not a good way to find out what people who might use his restaurant like to eat.

- (c) Write down two reasons why this is not a good way to find out what people who might use his restaurant like to eat.

- 1st reason Only two food options
- 2nd reason Leading question

(2)

(Total 6 marks)

9. Gary wants to find out how much time teenagers spend listening to music. He uses this question on a questionnaire.

How many hours do you spend listening to music?			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
1 to 5	5 to 10	10 to 20	over 20

- (a) Write down **two** things wrong with this question.

1 No time frame in question

2 Boxes overlap

(2)

- (b) Design a better question for Gary's questionnaire to find out how much time teenagers spend listening to music.

How many hours of music do you listen to each day?

☐ none

☐ 1min - 2hrs

☐ 2h1min - 4hrs

☐ more

(2)

(Total 4 marks)

10. Sophie wants to find out the amount of time people exercise.

She will use a questionnaire.

- (a) Design a suitable question for Sophie to use in her questionnaire.

You must include some response boxes.

How much exercise do you do each day?

☐ none

☐ 1 min - 60min

☐ 61 min - 120min

☐ more

(2)

Sophie asks the people at her swimming pool to complete her questionnaire.

This may **not** be a suitable sample.

- (b) Give a reason why.

These people definitely do exercise. Sample would be biased.

(1)

(Total 3 marks)