Edexcel GCSE Mathematics (Linear) – 1MA0

Mean, Median, Mode & Range

Materials required for examination Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser. Tracing paper may be used. Items included with question papers Nil



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. 1. Chloe made a list of her homework marks.

2.

4 5 5 5 4 3 2 1 4 5

- (a) Write down the mode of her homework marks.
- (1) (b) Work out her mean homework mark. (2)(Total 3 marks) Peter rolled a 6-sided dice ten times. Here are his scores. 3 2 4 6 3 3 4 2 5 4 (a) Work out the median of his scores. (2) (b) Work out the mean of his scores. (2) (c) Work out the range of his scores.

(1) (Total 5 marks)

3.	Here are the weights, in kg, of 8 people.									
		63	65	65	70	72	86	90	97	
	(a)	Write	down	the mo	de of the	e 8 wei	ghts.		kg	
	(b)	Work	out the	e range	of the w	veights				(1)
								•••••	kg	(2)
									(Total 3	
4.	Her	e are th	ne ages	of 6 pe	ople.					
		-	5	18	10	14	22	12		
	(a)	Work	out the	e range	of these	e ages.				
	(b)	Find t	the mec	lian age	е.					(1)
	(c)	Work	out the	e mean	age.					(2)
										(2)

(2) (Total 5 marks) 5. Here are the shoe sizes of 6 students.

2 10 7 6 10 9

(a) Work out the range of these shoe sizes.

(1) (b) Find the median shoe sizes. (2)(c) Work out the mean shoe sizes. (2) (Total 5 marks) 6. Jalin wrote down the ages, in years, of seven of his relatives. 40, 43, 43, 39, 45, 38, 39 (a) Find the median age. (1) (b) Work out the range of the ages. (1) (c) Work out the mean age.

> (2) (Total 4 marks)

7. Mr Smith kept a record of the number of absences for each student in his class for one term.

Η	ere are	e his	results	5.									
	0	0	0	8	4	5	5	3	2	1			
(a) Wı	rite d	own tl	ne moo	le.							(1)
(b) Wo	ork o	out the	mean.									
											(Total	(2 3 marks	·
. Н	ere are	e 10 i	numbe	ers.									
(a)	Find	3 the m	2 ode of			4 ers.	6	2	1	2		
(1	o) Fir	nd the	e medi	an of t	hese r	umber	rs.					(1)
(c) Fir	nd the	e range	e of the	ese nu	mbers						(2)
									•••••		(T - 4	(2)

8.

(Total 5 mark)

9.	Her	e are the	test ma	rks o	of 6 g	girls	and 4	boys.					
	(Girls:	5	3	10	2	7	3					
]	Boys:	2	5	9	3							
	(a)	Write do	own the	e mo	de o	f the	10 m	arks.					
													(1)
	(b)	Work ou	it the n	nedia	an m	ark c	of the	boys.					
													(2)
	(c)	Work ou	ut the r	ange	of t	he gi	rls' n	narks.					(_)
													(1)
	(d)	Work ou	ut the n	nean	mar	'k of	all 10) stude	nts.				
												 (Total 6	(2) marks)
10.	Her	e are ten	numbe	rs.									
	7	6	8	4		5	9	, ,	7	3	6	7	
	(a)	Work ou	ut the r	ange	•								
													(2)
	(b)	Work ou	ut the n	nean	•								
												•••••	
												(Total 4	(2) marks)

11. Here are fifteen numbers.

	10	12	13	15	15				
	17	19	20	20	20				
	21	25	25	25	25				
(a) I	Find the mode	e.							
							•••••		(1)
(b) I	Find the medi	an.							(1)
									(1)
(c) V	Work out the	range							(1)
(C)	Work out the	range.							
							••••	(Total 4	(2) marks)
12. A rug	by team play	ed 7 gar	nes.					(I otur	mur Kby
-		_							
Here	is the number	of poin	its they	v scor	ed in e	each gan	ne.		
Here	is the number 3		its they 8			ach gan 12	ne. 12	16	
		5			ed in e 9			16	
	3	5						16	
	3	5							(2)
(a) H	3	5 an. ayed and	8	ç					(2)

(3) (Total 5 marks) **13.** Tom recorded the shoe size of five of his friends. Here are his results.

8 9 3 4 7

(a) Work out the median shoe size.

Another friend has a shoe size of 8

(b) Work out the median shoe size of all **six** friends of Tom.

.....

(2) (Total 4 marks)

(2)

14. The mean of eight numbers is 41The mean of two of the numbers is 29

What is the mean of the other six numbers?

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(Total 3 marks)