Mark scheme

Scatter diagrams and correlation

Mathematics 0580 · Questions from Paper 1, Paper 2 and Paper 3

Total marks

37

MARKS FOR EACH QUESTION

1	2	3	4	5	6	7	8	9	10	Total
2	2	3	3	4	4	4	4	5	6	**37**

Question 1 [2]

1(a)	positive	**1**	
1(b)	the higher the temperature the higher the number of people oe	**1**	

Question 2 [2]

2(a)	It is not possible to tell if there is correlation as there are not enough points.	**1**	
2(b)	C	**1**	

Question 3 [3]

3 (a)	Positive	**1**	
(b)	Zero oe	**1**	
(c)	Negative	**1**	

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Question 4 [3]

4(a)	4800	**1**	
4(b)	Point plotted at (54 000, 6100)	**1**	
4(c)	Positive	**1**	

Question 5 **[4]**

5	**(a)**	16 [kg]	**1**	
	(b)	Positive	**1**	
	(c) **(i)**	Ruled line of best fit	**1**	
	(ii)	Correct reading from ruled line	**1FT**	

Question 6 **[4]**

6(a)	12.88	**1**	
6(b)	two correct points plotted	**1**	
6(c)	ruled line of best fit	**1**	
6(d)	negative	**1**	

Question 7 **[4]**

7(a)	27000	**1**	
7(b)	Point plotted at (175, 9)	**1**	
7(c)	Correct single ruled line of best fit	**1**	
7(d)	300 to 350	**1**	**FT** *their* straight line of best fit provided positive gradient

Question 8 **[4]**

8(a)	A ring around the point (70, 60)	**1**	
8(b)	Point correctly plotted at (75, 140)	**1**	
8(c)	5	**1**	
8(d)	Positive	**1**	

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Question 9 **[5]**

9(a)	4 points correctly plotted	**2**	**B1** for 2 or 3 points correctly plotted
9(b)	Negative	**1**	
9(c)	Correct ruled line of best fit	**1**	
9(d)	10 to 12	**1**	**FT** *their* straight line of best fit

Question 10 **[6]**

10(a)	4 points correctly plotted	**2**	**B1** for 2 or 3 points correctly plotted
10(b)	(40, 18) indicated	**1**	
10(c)	Positive	**1**	
10(d)	Correct ruled line	**1**	
10(e)	76 to 80	**1**	**FT** their ruled line of best fit

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