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Pearson Edexcel Level 1 Award in Handling Data (QCF)

Sample Assessment Materials (SAMs)

First teaching January 2014

ALWAYS LEARNING

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LEVEL 1 HANDLING DATA (QCF)

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Introduction

Sample assessment materials (SAMs) provide learners and centres with specimen questions and mark schemes. These are used as the benchmark to develop the external assessment learners will take.

Handling Data

The SAM for this unit has been provided for the following qualification:

- Pearson Edexcel Level 1 Award in Handling Data (QCF).

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Handling Data – Sample assessment test and mark scheme

This sample assessment test and mark scheme is for the following qualification:

- Pearson Edexcel Level 1 Award in Handling Data (QCF).

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Pearson Edexcel

Award in Handling Data (QCF) Level 1

Sample Assessment Material **Time: 1 hour**	Paper Reference XXX/XX

Resources: Metric ruler	Total marks: 22
Center Name:	
Centre Number:	
Candidate's Name:	
Registration Number:	

Instructions

- A calculator must **not** be used in the test paper.
- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and registration number.
- Answer all questions.
- Answer the questions in the spaces provided
  – there may be more space than you need.

Information

- The total mark for this paper is 22.
- The marks for **each** question are shown in brackets
  – use this as a guide as to how much time to spend on each question.
- Some questions must be answered with one tick in a box (✔).
  If you change your mind about an answer, put a line through the box ([☒]) and then mark your new answer with a tick [✔].

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.

Turn over ▶

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Question 1

This table shows information about hotels in a city.

Hotel Name	Guest Rating	Distance from city centre (miles)	Price per night
Central	4.3	0.3	£169
Crown	3.6	1.4	£137
Grand	4.2	0.7	£125
Palace	3.9	1.2	£115
Princess	4.4	0.8	£152
Principal	4.1	0.9	£129
Royal	4.5	2.5	£128
Victoria	3.9	0.5	£127

A customer wants to find a hotel that:

- has a guest rating **greater than** 4.0
- must be **less than** 1 mile from the city centre
- costs **less than** £130 per night.

(a) Choose **one** hotel which meets all these requirements.

(1)

Answer:

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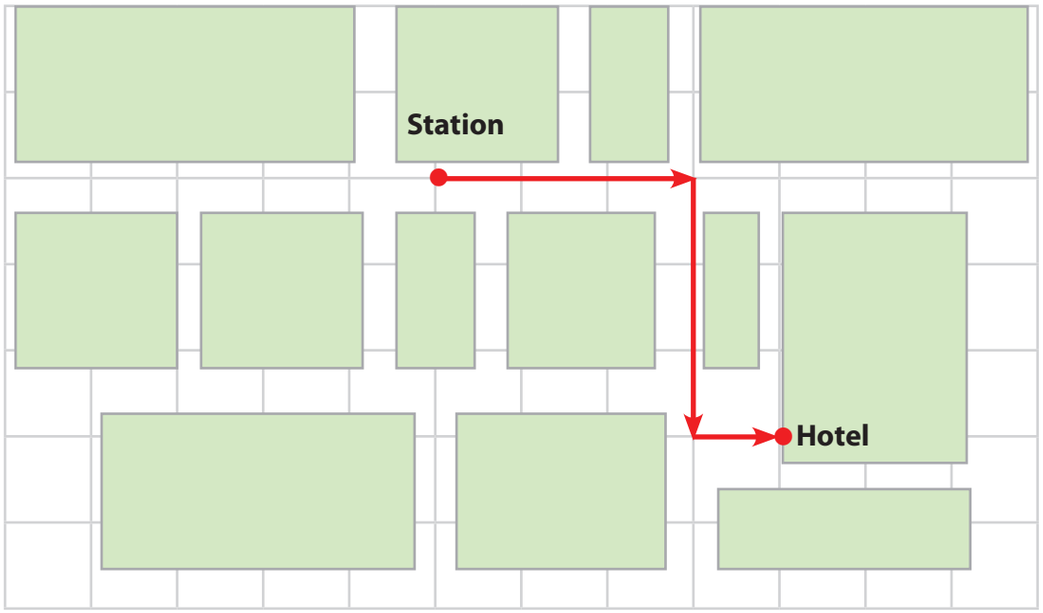
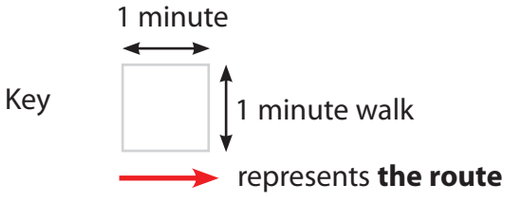
This map shows how to get from the station to a hotel.





(b) How long will it take to walk from the station to the hotel using **the route** shown on the map?

(1)

Answer: **minutes**

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Guests rate hotels on a scale of 1 to 5, where 1 is poor and 5 is excellent.

These are the ratings from some **recent** guests at a hotel.

Guest	A	B	C	D	E	F	G	H	J	K
Rating	4	3	4	2	5	5	3	5	3	4

(c) Calculate the mean guest rating.

(2)

You must show your working here:

Mean guest rating:

(d) Calculate the range of the guest ratings.

(2)

You must show your working here:

Guest ratings range:

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This information is about the guest ratings for the hotel over the **last year**.

Mean	4.3
Range	2

(e) (i) Compare the mean guest rating from **last** year with the mean guest rating for **recent** guests.

Make a comment about your findings.

(1)

Comment:

(ii) Compare the range of the guest ratings **last** year with the range of the guest ratings for **recent** guests.

Make a comment about your findings.

(1)

Comment:

(Total for Question 1 = 8 marks)

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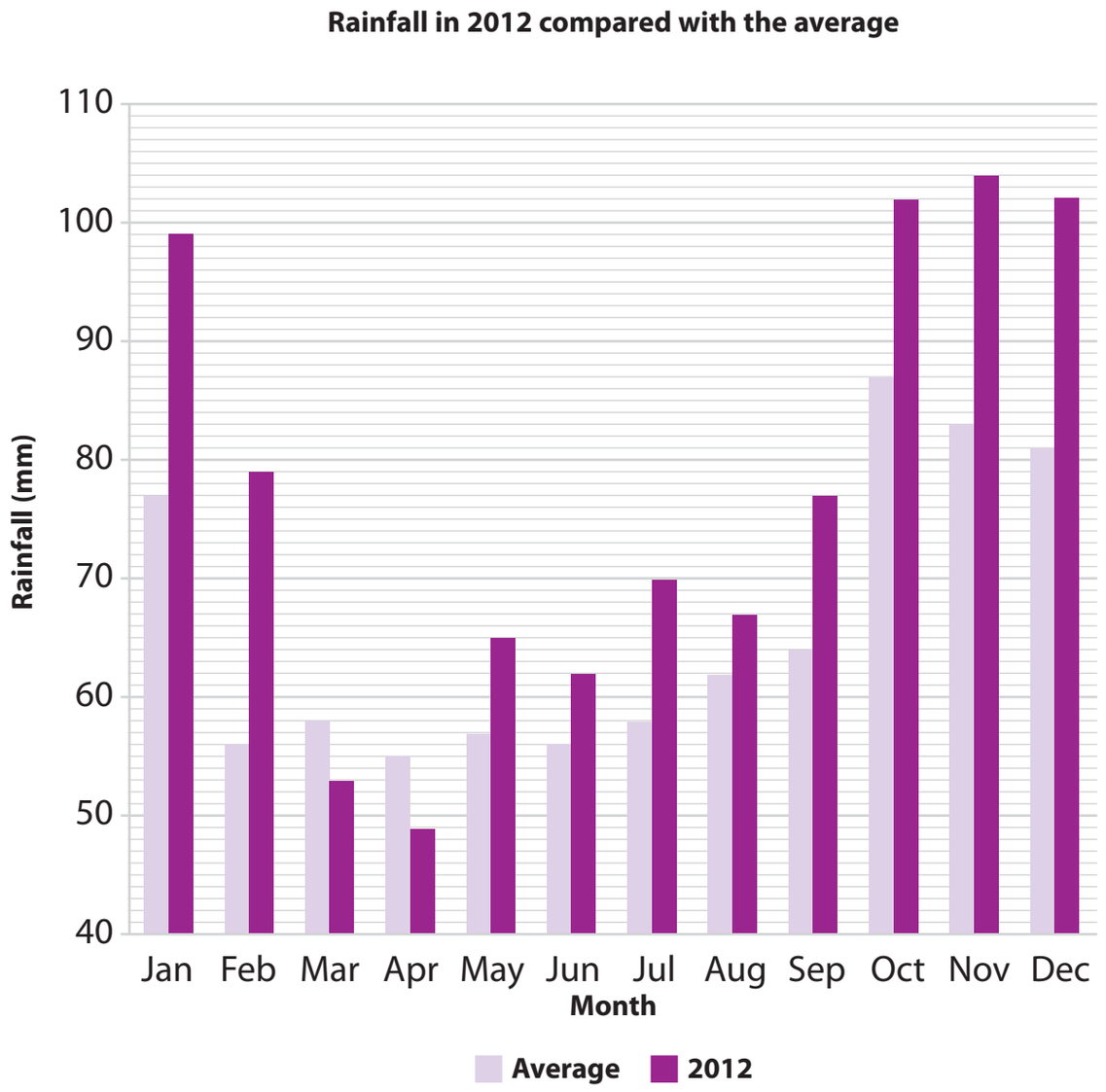
Question 2

This graph shows rainfall in 2012 compared with average rainfall.



(a) What was the **average** amount of rainfall in April?

(1)

Average rainfall in April: **mm**

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(b) Which month had the highest **average** rainfall?

(1)

Answer:

(c) Make **one** comment on the total rainfall in Jan-June 2012 compared with July-December 2012.

(1)

Answer:

A weather forecaster states that the probability of rain for the day is 20%.

(d) Which of these best describes how likely it is to rain that day?

Put a tick (✓) against the correct answer.

		✔
A	Impossible	
B	Not very likely	
C	Equally likely to rain as not to rain	
D	Very likely	
E	Certain	

(1)

(Total for Question 2 = 4 marks)

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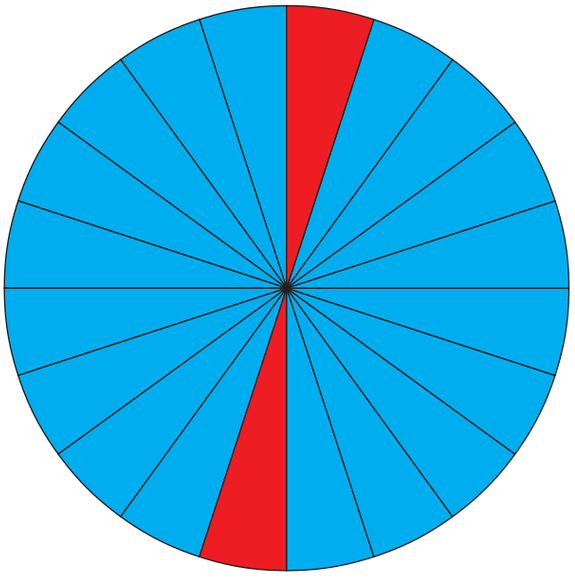
Question 3

The organisers of a charity fair want to run a game of chance to raise money.

They want to choose between two games, the Treasure Map and the Lucky Wheel.

The Lucky Wheel has 20 segments, 18 blue and 2 red. There is an equal chance that the wheel will stop on any of the segments.
Players spin the wheel, and if it stops on a red segment, they win a prize.



(a) Calculate the probability of winning a prize in the Lucky Wheel game.

Give your answers in their simplest form.

(2)

You must show your working here:

Answer:

The probability of winning a prize on the Treasure Map game is $\frac{1}{20}$

(b) What do the probabilities of winning each game show about the chances of winning?

(1)

Answer:

(Total for Question 3 = 3 marks)

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Question 4

An assistant in a shopping centre counts people entering different types of shop.

These are the results.

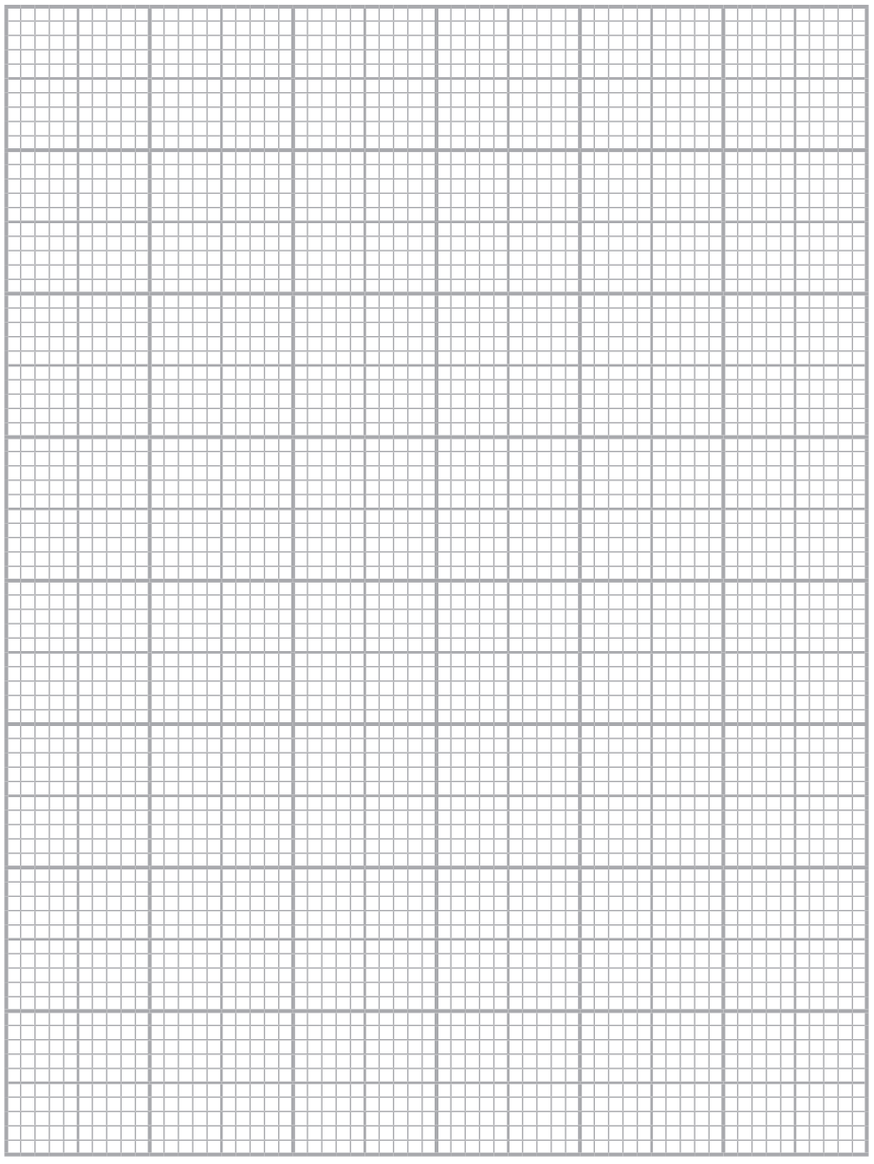
Number of people entering shops					
Type of shop	Fashion shops	Food shops	Phone shops	Toy shops	Shoe shops
Number of people	125	168	320	106	182

(a) Draw a graph or chart to display these results.

(3)

Number of people entering shops

Number of people



Type of shop

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(b) What does the graph show about the numbers of people entering different types of shops?

(1)

Answer:

(Total for Question 4 = 4 marks)

Question 5

A football supporter compares the goals scored by a team in the first half and the second half of matches.

She collects data in a tally chart

When goals were scored	Tally	Frequency
First half	𝍸 𝍸 𝍸 ///	
Second half	𝍸 //	

In the latest match, the team scored 2 goals in the first half and 1 goal in the second half.

(a) Add the information about the **latest** match to the tally chart.

(1)

(b) Complete the Frequency column in the tally chart

(2)

(Total for Question 5 = 3 marks)

TOTAL FOR PAPER 22 MARKS

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General Marking Guidance

- All candidates must receive the same treatment. Assessors must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Assessors should mark according to the mark scheme.
- All marks on the mark scheme should be used appropriately.
- All marks on the mark scheme are designed to be awarded. Assessors should always award full marks if deserved, i.e. if the answer matches the mark scheme. Assessors should also be prepared to award zero marks if a candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When assessors are in doubt about applying the mark scheme to a candidate's response, the centre's internal verifier must be consulted.
- Crossed-out work should be marked UNLESS the candidate has replaced it with an alternative response.

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Question	Reference	Answer	Notes	Total marks
1a	1.1	Grand or Principal (Allow if correct answer circled in text)	1 mark for a correct hotel (award maximum of 1 mark)	1
1b	1.1	7 (minutes)	1 mark for correct answer	1
1c	3.1	(4+3+4+2+5+5+3+5+3+4 =)38, 38 ÷ 10 = 3.8	1 mark for correct method for mean 1 mark for correct answer	2
1d	3.1	5 - 2 = 3	1 mark for correct method for range 1 mark for correct answer	2
1e(i)	3.3	e.g. The recent guests gave lower ratings on average than guests last year or a similar comment.	1 mark correct statement	1
1e(ii)	3.3	e.g. The recent guests gave higher ranged-ratings than guests last year or a similar comment.	1 mark correct statement	1
2a	1.1	55 (mm)	1 mark for correct reading for the average (accept 54 or 56)	1
2b	1.2	October	1 mark for correct answer	1
2c	1.2	e.g there was more rainfall or a similar comment given	1 mark for correct statement	1
2d	3.3	B (Not very likely)	1 mark for correct answer	1
3a	3.2	2 ÷ 20 1/10 or 10% or 0.1	1 mark for correct method for to find probability 1 mark for correct probability simplest form	2
3b	3.3	A player is more likely to win a prize on the Lucky Wheel	1 mark for correct statement comparing the chances of winning, supported by working Accept answers from part 3a to follow through Do not accept the following: The Lucky Wheel is higher The Lucky Wheel fraction is more than the Treasure Map	1
4a	2.2	e.g. 	1 mark for suitable axis labels 1 mark for linear scale 1 mark for plots at correct heights	3
4b	1.2	The most popular type of shop is a phone shop Fewest people enter the toy shops	1 mark for correct answer.	1
5a	2.1	First half: 𝍸 𝍸 𝍸 𝍸 Second half: 𝍸 ///	1 mark for correct answer. Learners must draw a gate/tally to be awarded the mark for 1st half	1
5b	2.1	1st half 20 2nd half 8	1 mark for each frequency correct. Allow answers from part a to follow through	2
			Total Marks	**22**

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SAM Mark Scheme Coverage of Learning Outcomes

Question number	LO 1	LO2	LO3	Total
1a	1			
1b	1			
1c			2	
1d			2	
1e(i)			1	
1e(ii)			1	
2a	1			
2b	1			
2c	1			
2d			1	
3a			2	
3b			1	
4a		3		
4b	1			
5a		1		
5b		2		
Total marks available	**6**	**6**	**10**	**22**
Pass Mark	**4**	**4**	**7**	**15**

Candidates must achieve the pass mark for each learning outcome achieved plus minimum total of 15 out of 22 to achieve unit.

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Learning Outcome and Unit Achievement Record

Center Name:						
Centre Number:						
Candidate's Name:						
Registration Number:						
Assessor Name:						
Signature:						
Date Test Taken:						

Question number	LO 1	LO2	LO3	Total
1a				
1b				
1c				
1d				
1e(i)				
1e(ii)				
2a				
2b				
2c				
2d				
3a				
3b				
4a				
4b				
5a				
5b				
Total marks required to pass LO	**4**	**4**	**7**	**15**
Candidate marks total				
Pass Y/N?				

Candidates must achieve the pass mark for each learning outcome achieved plus minimum total of 15 out of 22 to achieve unit.

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DECLARATION

I confirm that the assessment was conducted properly and fairly and that the marks awarded are an accurate reflection of the performance of the candidate.

Assessor Signature

If this candidate has had any assisstance during this test please state the nature of the assistance and who provided it

If there any special circumstances that may have had a negative effect on the candidate's performance in this test please give details.

If internally verified:

Internal Verifier's Name:

Signature:

Date:

LEARNING OUTCOME	MARKS AVAILABLE	ASSESSOR MARKS	IV MARKS
1	6		
2	6		
3	10		
Pass mark: minimum for each learning outcome met and a minimum total of 21 marks. Delete pass or fail as appropriate.		**PASS – FAIL**	**PASS – FAIL**

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