



Pearson
Edexcel

Mark Scheme

Summer 2023 (Results)

Pearson Edexcel GCSE (9 – 1)
In Statistics (1ST0)
Foundation Paper 1F

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General marking guidance

These notes offer general guidance, but the specific notes for examiners appertaining to individual questions take precedence.

- 1** All candidates must receive the same treatment. Examiners must mark the last candidate in exactly the same way as they mark the first.

Where some judgement is required, mark schemes will provide the principles by which marks will be awarded; exemplification/indicative content will not be exhaustive. When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the response should be sent to review.

- 2** All the marks on the mark scheme are designed to be awarded; mark schemes should be applied positively. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme. If there is a wrong answer (or no answer) indicated on the answer line always check the working in the body of the script (and on any diagrams), and award any marks appropriate from the mark scheme.

Questions where working is not required: In general, the correct answer should be given full marks.

Questions that specifically require working: In general, candidates who do not show working on this type of question will get no marks – full details will be given in the mark scheme for each individual question.

- 3** **Crossed out work**

This should be marked **unless** the candidate has replaced it with an alternative response.

- 4** **Choice of method**

If there is a choice of methods shown, mark the method that leads to the answer given on the answer line.

If no answer appears on the answer line then mark both methods **as far as they are identical** and award these marks.

- 5** **Incorrect method**

If it is clear from the working that the "correct" answer has been obtained from incorrect working, award 0 marks.

- 6** **Follow through marks**

Follow through marks which involve a single stage calculation can be awarded without working as you can check the answer, but if ambiguous do not award. Follow through marks which involve more than one stage of calculation can only be awarded on sight of the relevant working, even if it appears obvious that there is only one way you could get the answer given.

- 7** **Ignoring subsequent work**

It is appropriate to ignore subsequent work when the additional work does not change the answer in a way that is inappropriate for the question or its context. (eg an incorrectly cancelled fraction when the unsimplified fraction would gain full marks).

It is not appropriate to ignore subsequent work when the additional work essentially makes the answer incorrect (eg incorrect algebraic simplification).

- 8** **Probability**

Probability answers must be given as a fraction, percentage or decimal. If a candidate gives a decimal equivalent to a probability, this should be written to at least 2 decimal places (unless tenths).

Incorrect notation should lose the accuracy marks, but be awarded any implied method marks.

If a probability fraction is given then cancelled incorrectly, ignore the incorrectly cancelled answer.

9 Range of answers

Unless otherwise stated, when an answer is given as a range (eg 3.5 – 4.2) then this is inclusive of the end points (eg 3.5, 4.2) and all numbers within the range.

Guidance on the use of abbreviations within this mark scheme

M	method mark awarded for a correct method or partial method
A	accuracy mark (awarded after a correct method; if no method is seen then full marks for the question are implied but see individual mark schemes for more details)
B	unconditional accuracy mark (no method needed)
oe	or equivalent
cao	correct answer only
ft	follow through (when appropriate as per mark scheme)
sc	special case
dep	dependent (on a previous mark)
indep	independent
awrt	answer which rounds to
isw	ignore subsequent working

Question number	Answer	Additional guidance	Mark
1(a)	B1 for 178		(1)
(b)	B1 for Latvia		(1)
(c)	<p>B2 for the difference in Italy is 13 and in Australia(Philippines) it is 14 (13), so no/Afzal is not correct</p> <p>(B1 for any correctly identified difference)</p>	<p>Award B2 for the differences compared between two relevant countries and a correct conclusion. Must see 2 relevant differences next to table or in written answer.</p> <p>Allow B2 for No, Australia has a 1 cm greater difference. Figure must be correct for this. SC B1 for the difference in Italy and the Philippines is the same.</p> <p>For B2 or B1 Accept correct differences seen by table.</p>	(2)
(d)	B1 for (Adult Males are) taller in Australia than (Adult Males) in Zimbabwe.	<p>B1 for Adult Males are 11cm taller in Australia Ignore incorrect figures if there is an indication that Australian males are taller oe.</p> <p>Allow B1 for there is an 11cm difference in heights. Figure must be correct for this.</p> <p>For taller accept higher/greater/larger/biggest/(average) height</p>	(1)
(e)	<p>B1 For one of e.g.</p> <ul style="list-style-type: none"> • Not appropriate as no time was given/recorded. • Not appropriate because only have data for one year 	<p>Do not accept:</p> <ul style="list-style-type: none"> • given data about heights not time <p>Condone 'data does not use time'</p>	(1)

Question number	Answer	Additional guidance	Mark
2(a)	B1 for a cross marked on 50%.		(1)
(b)	B1 for impossible circled (or otherwise unambiguously marked)	B0 if more than one word is circled	(1)
(c)	M1 for $\frac{1}{8} \times 80 = \dots$ oe $(80 \div 8)$ A1 for 10	For M1 condone $\frac{80}{6}$ (13.3̇, $\frac{40}{3}$, 13.33..) <p>Answer of $\frac{10}{80}$ scores M1A0 Do not award M1A0 for $\frac{1}{8}$ (0.125) unless this is a clear attempt at reducing the fraction $\frac{10}{80}$.</p> <p>Accept eg 10 out of 80, 10 times, 10 fives for M1A1</p>	(2)
(d)	B2 for Kasia's dice has more faces (numbers/sides) than Jonathan's dice, so yes /Jonathan is more likely (to roll a 6). (B1 Kasia's dice has more faces (numbers/sides) than Jonathan's dice with no or incorrect conclusion) or B2 $\frac{1}{6} > \frac{1}{8}$ oe and so yes/Jonathan is more likely to roll a 6. (B1 for Jonathan linked to $\frac{1}{6}$ (0.16̇ or 0.167 or 0.17 or 0.166 ...) or for Kasia linked to $\frac{1}{8}$ (0.125 or 0.13) or $\frac{1}{6} > \frac{1}{8}$ stated with no link to Jonathan/Kasia/probability of rolling 6)	Allow 1 in 6 chance /1 in 8 chance. Allow working in fractions, decimals or percentages.	(2)

Question number	Answer	Additional guidance	Mark
3	<p>B1 B1 for two of the following:</p> <ul style="list-style-type: none"> • 27.2(%) is missing /the vertical axis scale does not go up in equal steps. • The graph does not begin at 0 (so the heights of the bars are not proportional)/the heights of the bars are disproportionality represented by the vertical scale • The bar width/thickness for 2018 is different compared to 2019 (and gives a misleading impression of frequency). 	<p>Do not accept there is an error in the vertical axis with no further explanation, scale not in the correct order</p> <p>Do not accept: bars are different sizes/areas/colours/shades</p> <p>Do not accept axis not labelled or, no title.</p>	(2)

Question number	Answer	Additional guidance	Mark
4 (a)	B1 B1 for two from <ul style="list-style-type: none"> • easier / difficult to ensure whole population is used • cheaper • quicker • less data to handle/fewer people to ask 	Allow converse statement if census mentioned. Do not accept <ul style="list-style-type: none"> • not everyone will want to take part in the survey • she can choose who she wants to survey • reference to being able to explain the questions 	(2)
(b)(i)	B1 A list of all members of the population/ all people (who live) in the town	Do not accept 'whole group'	(1)
(b)(ii)	B1 for one from <ul style="list-style-type: none"> • children will not be included • only those registered to vote are on the list • difficulty in gaining access to electoral register/electoral register is confidential • the information the council has may be out of date/missing data/inaccurate 	Must be a relevant comment about the electoral register. Do not accept one word answers such as 'inaccurate/unreliable/bias' Condone Electoral register is unreliable	(1)
(c)	B1 B1 for any two from: <ul style="list-style-type: none"> • The pilot study identifies problems • Checks that questions work as intended • Gives an idea of what results may be (for suitability for analysis) • Tests questions are clear/understood • Gives an idea of response rate • Checks questions are inoffensive 		(2)

<p>(d)</p>	<p><u>Sampling method</u> B1 for appropriate sampling method identified, one of:</p> <ul style="list-style-type: none"> • Random sample • Stratified sample • Systematic sample <p>B1 Reason – any from</p> <ul style="list-style-type: none"> • every resident has an equal chance of being selected (random) • sample selected will be unbiased (random/stratified) • (if n is large) sample is representative of the population (random/stratified/systematic) <p><u>Question</u> B1 for an appropriately designed (or described design) question.</p> <p>depB1 Reason e.g. for explaining that their question/question design achieves one or more of:</p> <ul style="list-style-type: none"> • finds people views on the leisure centre proposal/information we want, • is non-leading • is closed/has response options <p><u>Statistical diagram</u> B1 For identifying a suitable statistical diagram e.g. Bar chart/line chart/pictogram/pie chart</p> <p>depB1 For reason: e.g. ... shows frequencies/allows comparison</p>	<p>Accept a correct description of conducting one of these appropriate sampling methods e.g. using a numbered list and random number generator/selecting names from a hat (random sample) e.g. a description of the strata and selecting randomly within these (stratified sample)</p> <p>Do not accept even chance.</p> <p>Appropriate must be:</p> <ul style="list-style-type: none"> • a non-leading closed question • with written (or implied) options for response. <p>If more than one question is suggested mark all and award highest score. B1B1 can only be awarded for one suggested question, not across multiple.</p> <p>e.g B1 Pie chart because... depB1 it shows proportions/percentages Do not accept Tally chart</p> <p>If more than one diagram is suggested mark all and award highest score. B1B1 can only be awarded for one suggested diagram, not across multiple.</p>	<p>(6)</p>
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Question number	Answer	Additional guidance	Mark
5(a)	<p>B2 for negative (correlation) so as the altitude increases, temperature decreases</p> <p>(B1 for either negative (correlation) or an explanation that the higher the altitude, the lower the temperature)</p>	<p>For B2 or B1 Accept converse when describing the correlation eg. (negative), as the temperature increases the altitude decreases.</p> <p>Ignore reference to strength of correlation.</p>	(2)
(b)	B1 for the line of best fit plotted correctly	Should go through all the points and be drawn with a ruler.	(1)
(c)	B1 for -14	<p>B0 if there is no line of best fit.</p> <p>B1 if their line of best fit</p> <p>Allow tolerance on their '-14' of half a small square.</p> <p>For follow through, the gradient of line of best fit must be negative.</p>	(1)
(d)	<p>B2 for extrapolating/outside of range for altitude/data only goes up to 10000(m) is not reliable so it is therefore not appropriate</p> <p>(B1 for reference to extrapolation/outside of range for altitude/data only goes up to 10000(m) with no or incorrect conclusion)</p> <p>or</p> <p>B2 for perfect correlation/strong correlation/all points lie on a straight line AND 11000 is close to the range of values for altitude therefore it is appropriate.</p> <p>(B1 for reference to strong correlation/perfect correlation/points lie close to the line of best fit with no or incorrect conclusion)</p>	Allow for beyond/outside of the data plotted or beyond/outside within the table.	(2)

Question number	Answer	Additional guidance	Mark
6(a)	B1 for <u>discrete</u> circled or otherwise unambiguously identified.	B0 if more than one word is circled	(1)
(b)	B1 for 0		(1)
(c)	B1 for 2	cao	(1)
(d)	B1 for one of eg: <ul style="list-style-type: none"> • median since it is middle value • median since the mode is 0 and there are clearly people with pets • mode since it is the most common value 		(1)
(e)	B1 for Lower Quartile = 0 or Upper Quartile = 4 B1 for 4	B1 may be awarded for 4 – k, k – 0, or circling value(s) in correct position in list B1B1 for answer 4 with no working B0B0 for answer 4 from incorrect working	(2)
(f)	B1ft e.g. median number, (3), for Wanda’s distribution is greater than the median, (2), of David’s distribution. Dep B1ft eg David’s friends have on average fewer pets than Wanda’s friends. B1ft for IQR, (4), is smaller for David’s distribution than it is for Wanda’s distribution, (5). depB1ft eg the spread of numbers of David’s pets is less varied than Wanda’s friends	B1ft for a correct statistical statement about the medians ft their median in (c) B1ft for a correct statistical statement about the IQR. ft their IQR in (e) Condone Wanda’s IQR (6) if statement is otherwise correct.	(4)
(g)(i)	B1 for either: <ul style="list-style-type: none"> • It would affect the statistical calculations/average • It may not be a genuine piece of data/may be an incorrect piece of data 	Or equivalent explanation. Allow reference to other statistical calculations that would be affected by an outlier. Do not accept error/skew/reference to 15 being much bigger than the others.	(1)
(ii)	B1 for it may be a genuine piece of data	Allow not all data will be included so not representative.	(1)

Question number	Answer	Additional guidance	Mark
7	<p>M1 for $\frac{28\ 152}{4\ 174\ 527} \times 10\ 000 = \dots$ OR $\frac{4\ 146\ 375}{4\ 174\ 527} \times 10\ 000 = \dots$</p> <p>A1 for 67.43... \Rightarrow 67 17 year olds</p> <p>OR 9932.5 \Rightarrow 9933 18 years and older</p> <p>A1 for 9933 18 years and older AND 67 17 year olds</p> <p>B1 for take a random sample within the strata oe</p> <p>B1 for e.g.</p> <ul style="list-style-type: none"> • Would be better if more age categories were used • Two ages categories are for very different sized groups • Better if categories were chosen that were closer in size/more representative of all ages • More appropriate to stratify by another category e.g gender 	<p>Do not award the final A mark if the final answers are not integers.</p> <p>Do not accept comments on unfair sizes of groups by ages/more likely to be chosen if over the age of 18.</p>	(5)

Question number	Answer	Additional guidance	Mark					
8(a)	B2 for all 4 correct numbers in the correct order. <table border="1" data-bbox="309 344 1122 379"> <tr> <td data-bbox="309 344 472 379">68</td> <td data-bbox="472 344 636 379">23</td> <td data-bbox="636 344 799 379">63</td> <td data-bbox="799 344 963 379">53</td> <td data-bbox="963 344 1122 379">35</td> </tr> </table>	68	23	63	53	35	(B1 for at least two correct numbers in the correct place)	(2)
68	23	63	53	35				
(b)	B1 for 00 – 37 represents 38 numbers/percent/correct proportion	Or equivalent explanation	(1)					
(c)	B1 for 13, 12 and 10 identified B1 for 6 (numbers to choose exactly 3 O+ blood types)	Award B1 for an indication of these numbers only.	(2)					
(d)	B2 for e.g the sample mean is likely to be close to the population mean, so yes, it is appropriate. (B1 for reference to the sample mean is likely to be close to the population mean, with no or incorrect conclusion) OR B2 for e.g 5 is a small sample size/not enough trials so it is not appropriate. (B1 for reference to a small sample size/not enough trials, with no or incorrect conclusion)	Or equivalent statement B2 for a complete assessment of the appropriateness of the method described (B1 for a correct statement with no or incorrect conclusion)	(2)					

Question number	Answer	Additional guidance	Mark
9(a)	B1 for continuous		(1)
(b)	M1 for use of correct scale (may be implied by either correct answer) A1 for 87 and 45		(2)
(c)	M1 for correctly plotting one bar using their scale A1 for both bars (35 and 14) correct on histogram with a correct scale	Do not accept frequency density values for scale unless label changed from frequency to frequency density.	(2)
(d)	B1 for correct interpretation of negative skew e.g. <ul style="list-style-type: none"> the weights of basketball players (from 2000 to 2009) below the median have a greater spread the mean of the basketball players weights is lower than the median of the basketball players weights more than half of the basketball players weigh more than the mean 	B1 for correct contextual interpretation of skew	(1)
(e)(i)	M1M1 $\frac{12 \times 175 + 146 \times 185 + 175 \times 195 + 323 \times 205 + 146 \times 215 + 8 \times 225}{810}$ (= 200.79 ...) A1 for 200.79...	M1 for consistent use of fx with x within interval (including end points) and attempt to sum. Use of mid-interval gives $2100 + 27010 + 34125 + 66215 + 31390 + 1800 = 162640$ If multiplications not shown then allow one incorrect product for both M marks. M1 for correct use of fx with x the mid-interval value, attempt to sum and division by 810 A1 for awrt 200.8 OR answer of 201 from correct working	(3)
(e)(ii)	B1ft for e.g. mean height of basketball players has increased (by 9.9 cm)	B1ft for correct comparison of means Accept e.g. increased (FT their value from (i)) Allow e.g. players have gotten taller (FT their value from (i)) Ignore figures when marking.	(1)

Question number	Answer	Additional guidance	Mark
10(a)	B1 for e.g. the number of motorcycles (first registered in the UK) is decreasing over time	B1 for a suitable hypothesis. B0 for a question. Require reference to: motorbike/motorcycle/vehicle; time e.g. over time / comparing years / comparing time of year; registrations or sales changing/increasing/decreasing/staying the same	(1)
(b)	<p>B1 for a correct statement identifying any seasonality e.g.</p> <ul style="list-style-type: none"> • the greatest values are in quarter 2 • the least values are in quarter 4 <p>depB1 for a correct interpretation in context for the identified seasonality e.g.</p> <ul style="list-style-type: none"> • ...which means more motorcycle registrations (Q2) • ...which means less motorcycle registrations (Q4) 	<p>B1 for a correct statement identifying seasonality Allow quarters to be identified by reference to correct season or months. Condone if quarter referenced and an incorrect attempt to interpret as a season / months. If more than one quarter commented on then ignore extra non-contradictory comments and interpretations. depB1 for a correct interpretation of seasonality</p> <p>B1B1 may be scored in a single comment e.g. more motorcycle registrations in spring Condone sales for registrations. Allow vehicles for motorcycles.</p>	(2)
(c)	<p>B1 for e.g.</p> <ul style="list-style-type: none"> • moving averages allow us to see the trend • the pattern in the data repeats after four quarters • this removes the seasonal variation 	<p>B1 for a correct statement assessing the appropriateness of using (4-point) moving averages Accept e.g. there are 4 quarters / 4 seasons.</p>	(1)
(d)	<p>B1 for a correct comparison of seasonality e.g.</p> <ul style="list-style-type: none"> • greatest values for motorcycles are in quarter 2, but the greatest values for cars are in quarter 1 • lowest values for <u>both</u> motorcycles and cars are in quarter 4 	<p>B1 for a correct statement comparing seasonality Must reference / indicate both motorcycles and cars in discussion of quarters. Do not accept reference to one year and quarter e.g. in 2017 quarter 1...</p>	(1)

		<p>Allow quarters to be identified by reference to correct season or months. Condone if quarter referenced and an incorrect attempt to interpret as a season / months.</p> <p>Ignore additional non-contradictory comments.</p>	
(e)	<p>M1 correct plotting of at least one moving average</p> <p>OR all moving averages with correct horizontal plotting</p> <p>OR all moving averages with correct vertical plotting</p> <p>A1 fully correct</p> <p>B1 straight trend line through moving averages within tolerance</p>	<p>M1 for correctly plotting one moving average OR for recognising correct horizontal or vertical positions</p> <p>Horizontal plots should be on the appropriate grid line. Vertical plots between 570 & 580 inclusive.</p> <p>A1 for accurately plotting the three moving averages</p> <p>B1 their line should extend in the horizontal direction at least from 2017 Q3 to 2019 Q2 and be vertically within two squares of 620 at Q3 2017 and two squares of 570 at Q2 2019</p> <p>Must be a ruled line.</p> <p>B1 may be awarded without plotting of the moving averages or with incorrect plots.</p>	(3)
(f)	<p>B2 for e.g. the number of cars (first registered in the UK) is decreasing over time</p> <p>(B1 for downwards/negative/correct description of the trend with missing or incorrect contextual interpretation)</p>	<p>B2 for a correct description of the trend with contextual interpretation</p> <p>(B1 for downwards/correct description of the trend with missing or incorrect contextual interpretation)</p> <p>Do not allow negative correlation alone, but condone if accompanied by e.g. decreasing / downwards trend.</p> <p>Ignore reference to figures.</p>	(2)

Quarters	Months	Condone for season
Quarter 1	January – March	Winter (Dec – Feb)
Quarter 2	April – June	Spring (March – May)
Quarter 3	July – September	Summer (June – August)
Quarter 4	October - December	Autumn (Sept – Nov)

Question number	Answer	Additional guidance	Mark																				
11(a)	<p>B2 for all 9 correct entries (B1 for at least 5 correct entries)</p> <table border="1" data-bbox="324 405 1160 831"> <tr> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> </table>		1	2	3	4	1	2	3	4	5	2	3	4	5	6	3	4	5	6	7		(2)
	1	2	3	4																			
1	2	3	4	5																			
2	3	4	5	6																			
3	4	5	6	7																			
(b)	<p>M1 for $\frac{n}{12} \quad 1 \leq n \leq 12$ or for $1 - \frac{n}{12} \quad 1 \leq n \leq 12$</p> <p>A1 ft for $\frac{9}{12}$ oe</p>	<p>ft their table of values</p> <p>Allow 75%</p> <p>If answer seen with no working, award M1A1</p> <p>Note: If table of values is not fully correct then method and answer may be correct or ft from their table of values.</p>	(2)																				

Modifications to the mark scheme for Modified Large Print (MLP) papers: 1ST0 1F

Only mark scheme amendments are shown where the enlargement or modification of the paper requires a change in the mark scheme.

The following tolerances should be accepted on marking MLP papers, unless otherwise stated below:

Angles: $\pm 5^\circ$

Measurements of length: ± 5 mm

PAPER: 1ST0_1F

Question	Modification	Mark scheme notes
1	Wording added 'Look at the table for Question 1 in the Data Booklet. It'. Wording removed 'The table'. Table enlarged and left aligned. Id Wording added 'in the Data Booklet'.	Standard mark scheme
2	Wording added 'Look at the diagram for Question 2 in the Data Booklet. It shows a probability scale'. Wording removed 'below' and replaced by 'in the Data Booklet'. Wording removed 'with a cross (x)'.	Standard mark scheme
3	Wording added 'Look at the diagram for Question 3 in the Data Booklet'. Wording removed 'following'. Wording added 'in the Data Booklet'. Diagram enlarged. Open headed arrows. Black grid lines added. Grey shading removed and replaced with dotted shading. Axes labels moved to top of vertical axis and to left of horizontal axis. Right axis labelled.	Standard mark scheme
4	No modifications.	Standard mark scheme
5c	Wording added 'Look at the diagram for Question 5 in the Data Booklet'. Table enlarged, turned vertical and left aligned. Wording added 'in the Data Booklet'. Diagram enlarged and left aligned. Open headed arrows. Axes labels moved to top of vertical axis and to right of horizontal axis. Small squares removed. Crosses changed to solid dots. Value changed from 4400 to 7000, so the candidate can use a grid line on the modified diagram to interpolate. Leeway needed.	B1 for -30 B0 if there is no line of best fit. B1ft their line of best fit. Allow tolerance on their -30 of half a square For follow through, the gradient of line of best fit must be negative.

PAPER: 1ST0_1F

Question	Modification	Mark scheme notes
6	<p>Wording added ‘Look at the information for Question 6(a), 6(b), 6(c), 6(d) and 6(e) in the Data Booklet. It shows some data.’</p> <p>Wording ‘Here is the data he collected.’ removed and replaced with ‘The data he collected is shown in the Data Booklet.’</p> <p>Data labelled ‘David’s data’.</p> <p>Wording added ‘Look at the table for Question 6(f) and 6(g) in the Data Booklet. It shows some data.’</p> <p>Wording ‘below’ removed and replaced with ‘in the Data Booklet’</p> <p>Data labelled ‘Wanda’s data’.</p> <p>Table enlarged and left aligned.</p>	Standard mark scheme
7	<p>Wording added ‘Look at the table for Question 7 in the Data Booklet. It’.</p> <p>Wording removed ‘The table’.</p> <p>Table enlarged.</p>	Standard mark scheme
8	<p>Wording added ‘Look at the table for Question 8(a) in the Data Booklet’.</p> <p>Wording added ‘in the Data Booklet’.</p> <p>Wording added ‘There are four spaces to fill’.</p> <p>Tables enlarged.</p> <p>Wording added ‘Look at the information for Question 8(c) and 8(d) in the Data Booklet. It shows a table of results and a set of random numbers.’</p> <p>Wording ‘below’ removed and replaced with ‘in the Data Booklet’.</p> <p>Wording added in the question paper ‘The set of random numbers used by Asha to complete the fifth trial are shown in the DB.’</p> <p>Wording added in the Data Booklet ‘The table below shows the results of Asha’s first 4 trials.’</p> <p>Number line left aligned and split into two rows of five.</p> <p>Table rotated.</p>	Standard mark scheme

PAPER: 1ST0_1F

Question	Modification	Mark scheme notes
9	<p>Q9(b) and 9(c) Wording added 'Look at the diagram for Question 9(b) and 9(c) in the Data Booklet. It shows an incomplete histogram.' Wording added 'in the Data Booklet'. Wording added 'on the following page'. Diagram enlarged. Small squares removed. Grey shading removed and replaced with dotted shading. Axes labels moved to top of vertical axis and to left of horizontal axis. Open headed arrows Black grid lines. Table enlarged and left aligned. Wording added 'in the Data Booklet'. Wording added 'on the previous page. There are two spaces to fill'. Wording added 'on the previous page'. Wording added 'in the Data Booklet.'</p> <p>Q9(e) Wording added 'Look at the table for Question 9(e) in the Data Booklet'. Wording 'below' removed and replaced with 'in the Data Booklet'. Table enlarged.</p>	Standard mark scheme

PAPER: 1ST0_1F

Question	Modification	Mark scheme notes
10	<p>Wording added 'Look at Diagram 1 for Question 10 in the Data Booklet. It shows a'.</p> <p>Wording removed 'The'.</p> <p>Wording removed 'shows' and replaced by 'with'.</p> <p>Diagram enlarged.</p> <p>Small squares removed.</p> <p>Black grid lines.</p> <p>Open headed arrows.</p> <p>Axes labels moved to top of vertical axis and to left of horizontal axis.</p> <p>Right axis labelled.</p> <p>Dashed lines made longer and thicker.</p> <p>Wording added 'in Diagram 1.'</p> <p>Wording added 'Look at Diagram 2 for Question 10 in the Data Booklet.'</p> <p>Wording added 'in the Data Booklet'.</p> <p>Diagram enlarged.</p> <p>Small squares removed.</p> <p>Black grid lines.</p> <p>Open headed arrows.</p> <p>Axes labels moved to top of vertical axis and to left of horizontal axis.</p> <p>Right axis labelled.</p> <p>Dashed lines made longer and thicker.</p> <p>Crosses changed to solid dots.</p> <p>Numbers stacked vertically and left aligned.</p> <p>Wording added 'on Diagram 2'.</p> <p>Leeway needed.</p>	<p>10e</p> <p>Changes to guidance: For M and A marks Horizontal plots should be on the appropriate grid line. Vertical plots between 550 & 600 inclusive.</p> <p>B1 their line should extend in the horizontal direction at least from 2017 Q3 to 2019 Q2 and be vertically between 600 and 650 at Q3 2017 and between 550 and 600 at Q2 2019 Must be a ruled line.</p>
11	<p>Wording added 'Look at the diagram for Question 11 in the Data Booklet. It is a sample space diagram.'</p> <p>Wording added 'in the Data Booklet'.</p> <p>Wording added 'There are nine spaces to fill'.</p> <p>Table enlarged.</p>	Standard mark scheme

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