



Mark Scheme (Results)

Summer 2018

Pearson Edexcel GCSE
In Statistics (5ST1F)
Foundation Paper 1F

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

Summer 2018

Publications Code 5ST1F_1806_MS

All the material in this publication is copyright

© Pearson Education Ltd 2018

NOTES ON MARKING PRINCIPLES

- 1** All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- 2** Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- 3** All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- 4** Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- 5** Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.
- 6** Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:

i) *ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear*

Comprehension and meaning is clear by using correct notation and labeling conventions.

ii) *select and use a form and style of writing appropriate to purpose and to complex subject matter*

Reasoning, explanation or argument is correct and appropriately structured to convey mathematical reasoning.

iii) *organise information clearly and coherently, using specialist vocabulary when appropriate.*

The mathematical methods and processes used are coherently and clearly organised and the appropriate mathematical vocabulary used.

7 With working

If there is a wrong 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.

If working is crossed out and still legible, then it should be given any appropriate marks, as long as it has not been replaced by alternative work.

If it is clear from the working that the "correct" answer has been obtained from incorrect working, award 0 marks. Send the response to review, and discuss each of these situations with your Team Leader.

If there is no answer on the answer line then check the working for an obvious answer.

Any case of suspected misread loses A (and B) marks on that part, but can gain the M marks. Discuss each of these situations with your Team Leader.

If there is a choice of methods shown, then no marks should be awarded, unless the answer on the answer line makes clear the method that has been used.

8 Follow through marks

Follow through marks which involve a single stage calculation can be awarded without working since you can check the answer yourself, 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.

9 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: e.g. incorrect canceling of a fraction that would otherwise be correct

It is not appropriate to ignore subsequent work when the additional work essentially makes the answer incorrect e.g. algebra.

Transcription errors occur when candidates present a correct answer in working, and write it incorrectly on the answer line; mark the correct answer.

10 Probability

Probability answers must be given as fractions, percentages or decimals. 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 answer is given on the answer line using both incorrect and correct notation, award the marks.

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

11 Linear equations

Full marks can be gained if the solution alone is given on the answer line, or otherwise unambiguously indicated in working (without contradiction elsewhere). Where the correct solution only is shown substituted, but not identified as the solution, the accuracy mark is lost but any method marks can be awarded.

12 Parts of questions

Unless allowed by the mark scheme, the marks allocated to one part of the question CANNOT be awarded in another.

13 Range of answers

Unless otherwise stated, when an answer is given as a range, e.g [3.5 – 4.2] then this is inclusive of the end points and includes all numbers within the range.

Guidance on the use of codes within this mark scheme

M1 – method mark

A1 – accuracy mark (dependent on method mark)

B1 – working mark

C1 – communication mark

QWC – quality of written communication

awrt – answer which rounds to

oe – or equivalent

cao – correct answer only

ft – follow through

sc – special case

dep – dependent (on a previous mark or conclusion)

indep – independent

isw – ignore subsequent working

Question	Scheme	Marks
1(a)	Oceania	B1 (1)
(b)	Europe	B1 (1)
(c)	12	B1 (1)
(d)	Female (life expectancy) is greater (than male life expectancy) or Female (life expectancy) is more spread (than male life expectancy).	B1 (1)
		[4]
Notes		
(d)	Allow any equivalent comparison which refers to either the 'average' life expectancy or the 'spread' of life expectancies. Allow 'live longer' for life expectancy. Ignore reference to figures Comment may refer to any or all regions.	

Question	Scheme	Marks				
2(a)	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>Tally</td> <td>Frequency</td> </tr> <tr> <td> </td> <td>9</td> </tr> </table>	Tally	Frequency		9	B1 (1)
Tally	Frequency					
	9					
(b)	A correct scaling (at least 2 numbers labelled on the vertical axis) A bar height of 9 for tea (or a correct ft bar height for tea) A bar height of 4 for water	B2 ft (2)				
(c)	Any one suitable reason from: <ul style="list-style-type: none"> • Sample is only done on Monday • Sample is only done in the morning • Sample size is too small/only asked 20 people • He hasn't asked all customers • Not representative (of all customers)/biased • Different day/time may give different results 	B1 (1)				
		[4]				
Notes						
(a)	B1 Both the tally and the frequency must be correct					
(b)	B2ft for all 3 features correct or correct ft of the 2 nd bar height from the tally chart (-1 each error or omission) Allow a bar height for tea which is closer to 9 than 8 or 10 Ignore width and shading of bars					

Question	Scheme	Marks
3(a)(i) (a)(ii) (b) (c) (d)	Age (Favourite) sport census Any one advantage from: <ul style="list-style-type: none"> • Accurate • Not biased • Reliable Any one problem from: <ul style="list-style-type: none"> • Some people might not want to give their age • Non-response/Missing data/not everyone may have a favourite sport • May take a long time • May be expensive • May be too much data to collect 	B1 B1 (2) B1 (1) B1 (1) B1 (1) [5]
Notes		
(c) (d)	Ignore extraneous non-contradictory comments e.g. 'you get a lot of opinions', 'wide range of answers' is B0 'Incorrect data' is too vague so B0, but allow e.g. 'people might lie about their age' for 1 st bullet point Ignore extraneous non-contradictory comments	

Question	Scheme	Marks																
4(a) (b) (c) (d) (e)	Grey Large Impossible/ No chance/ 0 $\frac{17}{100}$ o.e. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Black</th> <th>Not Black</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th>Small</th> <td>(10)</td> <td>54</td> <td>(64)</td> </tr> <tr> <th>Not Small</th> <td>20</td> <td>16</td> <td>36</td> </tr> <tr> <th>Total</th> <td>30</td> <td>70</td> <td>(100)</td> </tr> </tbody> </table>		Black	Not Black	Total	Small	(10)	54	(64)	Not Small	20	16	36	Total	30	70	(100)	B1 (1) B1 (1) B1 (1) B1 (1) B2 (2) [6]
	Black	Not Black	Total															
Small	(10)	54	(64)															
Not Small	20	16	36															
Total	30	70	(100)															
Notes																		
(c) (d) (e)	Allow any equivalent term. (Also allow $\frac{0}{100}$) Allow any equivalent fraction, decimal or percentage B2 all correct (B1 any 2 correct)																	

Question	Scheme	Marks
5(a)	Each number only occurs once.	B1 (1)
(b)	awrt 157	B1 (1)
(c)	243 – 34 (=209)	B1 (1)
(d)(i)	The mean will decrease oe.	B1
(d)(ii)	The range will increase oe.	B1 (2)
		[5]
Notes		
(a)	Allow equivalent comments: e.g. ‘all numbers are different’, ‘there is no most common number’, ‘each month is different’	
(c)	34 – 243 is B0	
(d)	Ignore reference to figures SC: If B0B0 is scored, then allow answers of awrt 146 for the mean and 216 for the range to score B1B0	

Question	Scheme	Marks
6(a)	[13 – 14]	B1 (1)
(b)	[3.5 – 4.5]	B1 (1)
(c)	Any two comparisons from : <ul style="list-style-type: none"> Adults in Wales spent more time on the internet at home Adults in Northern Ireland spent more time on the internet at work Adults in Northern Ireland spent more time on the internet anywhere else Adults in Northern Ireland spent more time on the internet in total Most time is spent on the internet at home in both countries 	B2 (2) [4]
Notes		
(c)	B2 for any two correct comparison (only allow each bullet point once) (B1 for any one correct comparison) Ignore figures Ignore extraneous non-contradictory comments Allow converse statements If the location is not specified, then allow ‘Northern Ireland spent more time on the internet’ for 4 th bullet point.	

Question	Scheme	Marks
7(a)	Point plotted at (62, 118)	B1 (1)
(b)	The price of the house is dependent upon the size of a house.	B1 (1)
(c)	Positive As the size of a house increases, the price increases.	B1 B1 (2)
(d)(i)	[142–144]	B1
(d)(ii)	Interpolation/80 is within the data set/80 lies between 62 to 79 <u>and</u> 81 to 103/It has been estimated from a size within the data set.	B1 (2)
(e)	Any one from, e.g. : <ul style="list-style-type: none"> Extrapolation/Estimating using a size outside the range of data (62 to 103) Estimating a house price from a different city 	B1 (1)
Notes		[7]
(a)	Allow ½ small square tolerance	
(b)	Allow ‘size is the independent variable’ or ‘size of the house is fixed’ Condone e.g. ‘the larger the house, the more expensive it is’ must be in that order	
(c)	For 2 nd B1, must be in context. May be in either order. Allow e.g. ‘as house size decreases, price decreases’ ‘Larger houses are more expensive’ is B0.	
(d)(i)	Also allow answers in the range 142000 to 144000	
(d)(ii)	Allow ‘because the correlation is strong’ or ‘ all of the points lie close to the line best fit’ for B1 ‘As it is on the line of best fit’ is B0	
(e)	Must be an example. Answers which only refer to the houses in the data set score B0.	

Question	Scheme	Marks
8(a)	2007, 2009, 2010, 2011	B1 (1)
(b)	(Vertical scale) doesn't start at 0	B1 (1)
(c)	Downward/falling trend	B1 (1)
(d)	2012 and 2013	B1 (1)
(e)	$\frac{6.33}{10.94} \times 100 (=58)$	B1 (1)
(f)	The number of crimes has <u>fallen 42%</u> since 2006/The number of crimes in 2015 is 58% of the number of crimes in 2006	B1 (1)
Notes		
(c)	Allow equivalent description (e.g. 'going down'/'decreasing') Condone 'negative trend', but negative correlation is B0 'Up and down' is B0 'Down every year except 2008' is B0.	
(e)	Any equivalent complete calculation which includes the numbers 6.33, 10.94 and 100 The calculation may be done in stages, but all stages must be seen. 9.1... × 6.33 on its own in B0 ISW after a correct calculation is seen	
(f)	Any correct interpretation which includes decrease and 42% or 58% of the original figure 'Crime has dropped by almost half' is B0	

Question	Scheme	Marks																																								
9 *(a)	<ul style="list-style-type: none"> Data is continuous (Otherwise B1 for ‘quantitative’/‘numerical’ o.e.) 	B2 (2)																																								
*(b)	<ul style="list-style-type: none"> Data is secondary (allow not primary) so reliability is unknown. 	B2 (2)																																								
(c)	<table style="border-collapse: collapse; margin-left: 20px;"> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">2</td> <td style="padding: 2px 5px;">1</td> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">1</td> <td style="padding: 2px 5px;">2</td> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">5</td> <td style="padding: 2px 5px;">7</td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">4</td> <td style="padding: 2px 5px;">0</td> <td style="padding: 2px 5px;">1</td> <td style="padding: 2px 5px;">5</td> <td style="padding: 2px 5px;">7</td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">5</td> <td style="padding: 2px 5px;">0</td> <td style="padding: 2px 5px;">1</td> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">5</td> <td style="padding: 2px 5px;">8</td> <td style="padding: 2px 5px;"></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">6</td> <td style="padding: 2px 5px;">0</td> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">4</td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> </tr> </table> <p style="text-align: center; margin-left: 100px;">Key: 2 1 means 21 (minutes)</p>	2	1	3						3	1	2	3	5	7			4	0	1	5	7				5	0	1	3	3	5	8		6	0	3	4					B2
2	1	3																																								
3	1	2	3	5	7																																					
4	0	1	5	7																																						
5	0	1	3	3	5	8																																				
6	0	3	4																																							
(d)	46	B1 (3)																																								
(e)	11	B1ft (1)																																								
(f)	64.5 – 20.5 = 44	B1ft (1)																																								
		M1 A1ft (2)																																								
		[11]																																								
Notes																																										
*(a)	<p>B2 for describing continuous nature of the data. Must use ‘continuous’ to score both marks.</p> <p>Otherwise allow B1 for description of data being numerical/numbers if no ‘continuous’.</p> <p>Ignore extra non-contradictory comments. e.g. ‘secondary continuous’ is B2, ‘quantitative discrete’ is B1, ‘qualitative continuous’ is B0, ‘discrete’ is B0 SC If B0 allow B1 for ‘primary’</p>																																									
*(b)	<p>B2 for recognising that the data is secondary and hence its reliability is unknown. Must use ‘secondary’ (or ‘not primary’) to score both marks.</p> <p>Note: accept comments implying unreliable but do not allow ‘inaccurate’.</p> <p>Otherwise allow B1 for an incomplete answer; e.g. ‘secondary’ with no mention of reliability, or recognising it may not be reliable but no ‘secondary’.</p> <p>But ‘data may be biased’ alone is B0 Ignore extra non-contradictory comments.</p>																																									
(c)	<p>B2 for fully correct stem and leaves (Accept ‘upside down’ i.e. 6 at top)</p> <p>Otherwise B1 for correct stem with three correct lines, or all leaves correct but unordered. (Condone stem as 20, 30, ... for B1) Final B1 for a usable key (‘minutes’ not required)</p>																																									
(d)&(e)	<p>Allow ft from their attempt at <u>ordered</u> stem and leaf (or ordered list). e.g. if they have 19 values only then ft median must be 10th</p>																																									
(f)	<p>M1 for at least one of 64.5 or 20.5 seen. (Allow ft from their attempt at an <u>ordered</u> stem and leaf, or from an ordered list). A1 44 ft (must have used upper/lower bounds correctly)</p>																																									

Question	Scheme	Marks
<p>10(a)</p> <p>(b)</p> <p>(c)</p> <p>ALT. $\frac{25}{100}$ (= 0.25) o.e.</p>	<p>0.4×0.4 or $1 - (0.24 + 0.24 + 0.36)$ (= 0.16)</p> <p>$(0.24 + 0.24 =) 0.48$ or $(0.5 - 0.48 =) 0.02$ This is close to 0.5 (so nearly evens)</p> <p>He would expect (about) 36 times (for double tails) So (25 is) fewer than (or not the same as) expected. o.e.</p> <p>This is lower than (or not the same as) expected. o.e.</p>	<p>B1 (1)</p> <p>B2 (2)</p> <p>M1 A1 (2)</p> <p>M1 A1</p> <p>[5]</p>
Notes		
Accept equivalent fractions or percentages for probability.		
<p>(a)</p> <p>(b)</p> <p>(c)</p>	<p>B1 for a correct equivalent calculation (that would lead to answer 0.16). Condone poor notation and words (e.g. ‘timesed by..’). Note: product may be shown on tree. Answer 0.16 not required.</p> <p>B2 for complete reasoning which mentions 0.48 (or 0.02) and recognises evens = 0.5 e.g. ‘0.02 off (evens)’ scores B2, BUT ‘0.48 is nearly evens’ alone is B1 Accept ‘0.48 and 0.52 are close’ for B2</p> <p>Otherwise allow B1 for a partial answer which recognises there are two ways to get one head and one tail. e.g. HT & TH, OR $0.24 (+) 0.24$ (note 0.24 may be seen as 0.4×0.6), OR 0.48 or 0.02 seen without a comparison</p> <p>M1 for 0.36×100, or $25 \div 100$, or 36 (or 11) or 0.25 seen A1 for clear working with a correct comparison. (e.g. $0.36 \neq 0.25$)</p>	

Question	Scheme	Marks
11(a)	(The proportion of losses is) greater for England, o.e. OR $\frac{100}{360} > \frac{80}{360}$	B1 (1)
(b)	$48 \times \frac{210}{360}$ o.e. = 28 cao	M1 A1 (2)
(c)	The angle/proportion for draws is smaller in the England pie chart (o.e.), so England have played more matches.	B1 depB1 (2) [5]

Notes		
(a)	Allow any correct comparison of proportion. (Accept e.g. sector/angle/area for 'proportion'.) e.g. The proportion is greater than $\frac{1}{4}$ for England and less than $\frac{1}{4}$ for Switzerland. For numerical comparison accept 95~105 and 75~85 or percentages 26~29 and 21~24	
(b)	Condone: England had more losses, o.e. M1 for any correct equivalent calculation e.g. $\frac{48}{360} \times 210$, $48 \div (360 / 210)$ Calculation may be seen in stages for M1 Final answer 28 scores M1A1	
(c)	1 st B1 for comparing angles (or sizes) for draws in the pie charts. Note they could find angle per match: England 7.5° , Switzerland awrt 9° 2 nd B1 dependent on 1 st B1, for England have played more matches. e.g. 'England, as the same number takes up a smaller portion' scores B1B1 or 'England, as they (also) had more wins and losses' scores B1B1	

Question	Scheme	Marks
12*(a)	Any two from: <ul style="list-style-type: none"> The <u>median</u> is higher in January. The <u>ranges</u> are the same/the <u>IQR</u> is lower in January. They both have <u>positive skew</u>. 	B1 B1 (2)
(b)	25% complete the race in less than 24 minutes/24 is the lower quartile in January <u>or</u> 50%/24 is the median in July. A greater proportion finish the race in less than 24 minutes in July	B1 B1 (2) [4]

Notes		
(a)	Allow each bullet point once. Must use correct statistical language to score the marks here. Must be a comparison (not just statement of values) Allow e.g. 'July is more positively skewed than January' for 3 rd bullet point Ignore extraneous non-contradictory comparisons	
(b)	1 st B1 for a correct proportion for either month 2 nd B1 for a correct comparison Condone 'more athletes' for greater proportion	

Question	Scheme	Marks
13(a)	<u>All</u> customers	B1 (1)
(b)	Any one from <ul style="list-style-type: none"> • May not include all customers/customers might not want to be on the database • Biased • Not up to date • Names may be repeated 	B1 (1)
(c)(i)	A pre-test/a (small scale) trial/a practice done before the study.	B1
(ii)	Any one from <ul style="list-style-type: none"> • Checks response rate • See if questions are understood/work • Makes sure questionnaire gets relevant answers • Identifies likely responses • Checks how long it will take • Allows you to make improvements 	B1 (2)
(d)	Any one from <ul style="list-style-type: none"> • Limits responses • Quicker to answer • Easier to process • Quicker/easier to analyse 	B1 (1)
(e)	Scatter (diagram)/scatter graph	B1 (1)
Notes		
(a)	Must state or imply all customers Allow e.g. ‘all people in the company’, ‘all people who had deliveries’ for B1 But ‘all customers last week’ is B0	
(b)	Any sensible problem of this sampling frame. ‘Not accurate’ on its own is B0.	
(c)(i)	Must be trial/test/practice oe A definition of a sample on its own is B0. e.g. ‘A small group from the population’	
(c)(ii)	‘A study’ on its own is B0 Do not allow <ul style="list-style-type: none"> • Checks for (spelling) mistakes/errors • See if questions are biased • See if questions are offensive 	
(d)	‘Easier’ or ‘quicker’ on its own is B0. Allow disadvantages if clearly discussing open questions.	

Question	Scheme	Marks
14(a)	36	B1
(b)	3 to 4	(1)
(b)	3 to 4	B1
*(c)	Positive	B1
*(c)	Skew	B1
*(c)	Positive	B1
*(c)	Skew	B1
*(c)	Positive	B1
*(c)	Skew	B1
(d)	$232 \div 60 = \text{awrt } 3.9$	M1 A1
(d)	$232 \div 60 = \text{awrt } 3.9$	(2)
(e)	$60 \times 0.95 [= 57]$	M1
(e)	Cumulative frequency reaches 57 at	A1
(e)	7 minutes.	(2)
(e)	7 minutes.	(2)
(e)	7 minutes.	[8]
	Notes	
(b)	Allow alternative notations (e.g. 3 to 4, $3 \leq x < 4$, $3 < t \leq 4$, etc.)	
(c)	Must use correct terminology here.	
(c)	‘Positive and negative’ is B0	
(d)	M1 for an attempt to divide by 60	
(d)	Do not allow a fraction for the final answer.	
(e)	M1 for attempting 95% of 60	
(e)	A1 7cao	
(e)	Correct answer only scores 2 out of 2.	

Modifications to the mark scheme for Modified Large Print (MLP) papers.

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:

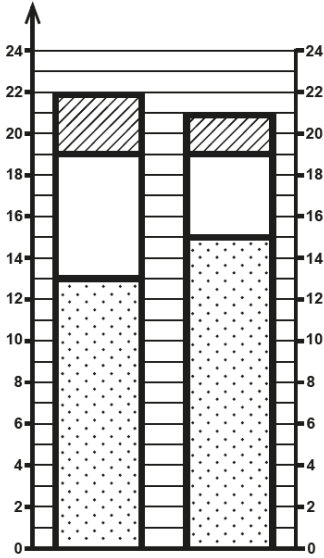
Angles: $\pm 5^\circ$

Measurements of length: ± 5 mm

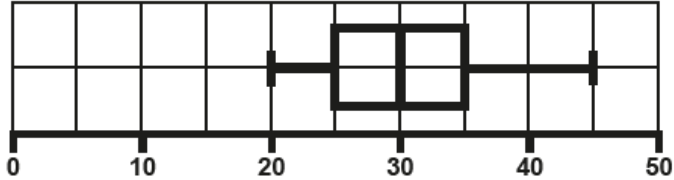
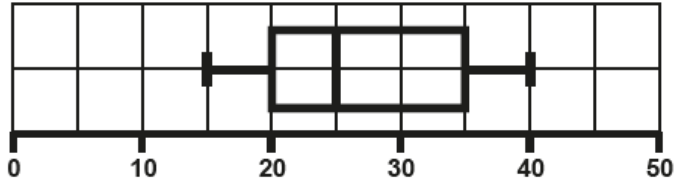
Paper: 5ST1F/01																			
Question		Modification	Mark scheme notes																
Q 2		Braille only: will label the answer spaces (i) and (ii).	Standard Mark Scheme																
Q2	(a)	Wording added 'There are two spaces to fill.'	Standard Mark Scheme																
Q2	(b)	Diagram enlarged. Shading changed to dotty shading. Axes labels have been moved to the left of the horizontal axis and above the vertical axis.	Standard Mark Scheme																
Q4	(e)	Braille only: will label the answer spaces (i) to (vi) as shown below. Wording added 'There are six spaces to fill.'	Standard Mark Scheme																
		<table border="1"> <thead> <tr> <th></th> <th>Black</th> <th>Not black</th> <th>total</th> </tr> </thead> <tbody> <tr> <td>Small</td> <td>10</td> <td>(i)</td> <td>64</td> </tr> <tr> <td>Not too small</td> <td>(iii)</td> <td>(iv)</td> <td>(ii)</td> </tr> <tr> <td>total</td> <td>(v)</td> <td>(vi)</td> <td>100</td> </tr> </tbody> </table>		Black	Not black	total	Small	10	(i)	64	Not too small	(iii)	(iv)	(ii)	total	(v)	(vi)	100	
	Black	Not black	total																
Small	10	(i)	64																
Not too small	(iii)	(iv)	(ii)																
total	(v)	(vi)	100																

Paper: 5ST1F/01

Paper: 5ST1F/01		
Question	Modification	Mark scheme notes
Q5	Table has been turned to vertical format.	Standard Mark Scheme
Q6	Q 6 Diagram enlarged. Axis label has been moved above the vertical axis. Key has been moved above and to the left of the diagram. Right axis has been labelled. Points on the diagram have moved so that: Northern island; home – 13, work – 19 and anywhere else – 22. Wales; home – 15, work – 19 and anywhere else – 21. Wording added 'adapted from' after 'Source:' Shading on the diagram has changed.	6(a) Allow any answer from 13 to 14 6(b) Allow any answer from 3.5 to 4.5

Question	Modification	Mark scheme notes															
<p>Q 6</p> <p>Cont.</p>	<div data-bbox="430 331 573 456" style="margin-bottom: 10px;"> <p> anywhere else work home </p> </div> <p data-bbox="376 475 658 497">Hours spent on the internet per week</p>  <table border="1" data-bbox="479 497 801 1056"> <caption>Hours spent on the internet per week</caption> <thead> <tr> <th>Region</th> <th>Home</th> <th>Work</th> <th>Anywhere else</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Northern Ireland</td> <td>13</td> <td>6</td> <td>3</td> <td>22</td> </tr> <tr> <td>Wales</td> <td>15</td> <td>4</td> <td>1</td> <td>20</td> </tr> </tbody> </table> <p data-bbox="360 1075 568 1094">Source adapted from: Ofcom.org</p>	Region	Home	Work	Anywhere else	Total	Northern Ireland	13	6	3	22	Wales	15	4	1	20	<p>Standard Mark Scheme</p>
Region	Home	Work	Anywhere else	Total													
Northern Ireland	13	6	3	22													
Wales	15	4	1	20													

Paper: 5ST1F/01			
Question		Modification	Mark scheme notes
Q 7		Table has been turned to vertical format and left aligned. Numbers in the table for H have changed to size – 65, price 120. Diagram has been enlarged. Axes labels have been moved to the left of the horizontal axis and above the vertical axis. Right axis has been labelled. Crosses have been changed to solid dots. Wording added 'adapted from' after 'Source:'	7(a) Point plotted at (65, 120) allow 1 square tolerance
Q7	(d)	[Leeway will be needed for this question].	Allow any answer from 140 to 146
Q8		Diagram enlarged. Axes labels have been moved to the left of the horizontal axis and above the vertical axis. Right axis has been labelled. Crosses have been changed to solid dots.	Standard Mark Scheme
Q9	(c)	Diagram enlarged. Horizontal line has been added to the bottom of the stem and leaf diagram.	Standard Mark Scheme
Q10		Diagram enlarged.	Standard Mark Scheme
Q11		Diagram enlarged. Key has been moved to the left of the diagram. Shading has been changed.	Standard Mark Scheme

Question	Modification	Mark scheme notes
<p>Q12</p>	<p>Diagrams enlarged. Points on the box plots have moved to: January: 20, 25, 30, 35 45. July: 15, 20, 25, 35, 40.</p> <div style="text-align: center;"> <p>January</p>  <p>Race time (minutes)</p> </div> <div style="text-align: center; margin-top: 20px;"> <p>July</p>  <p>Race time (minutes)</p> </div>	<p>12(a) Allow January is symmetric and July has positive skew for 1 comparison.</p>

Paper: 5ST1F/01

Question	Modification	Mark scheme notes
Q14	Diagram enlarged. Shading has been changed to dotted shading. Right axis has been labelled. Axes labels have been moved to the left of the horizontal axis and above the vertical axis.	Standard Mark Scheme

