

Statistics GCSE

Paper 2

Edexcel Foundation - 2026

Foundation Tier

Variant 4

1ST0/2F

Mark scheme

Visit our website for tutorials on each question.

www.statsgcse.com

Question	Mark Scheme	Mark
1 (a)	[1 mark] unlikely	1

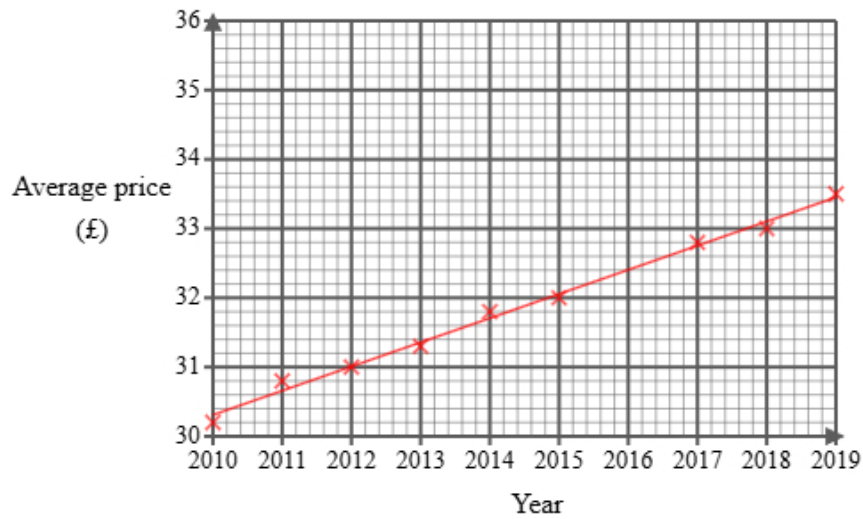
Question	Mark Scheme	Mark
1 (b)	[1 mark] certain	1

Question	Mark Scheme	Mark
1 (c)	[1 mark] B	1

Question	Mark Scheme	Mark
1 (d)	[1 mark] F	1

Question	Mark Scheme	Mark
<p>2 (a)</p>	<p>(part i) [2 marks] all three points plotted correctly OR [1 mark] at least one point plotted correctly</p> <p>(part ii) [1 mark] Straight trend line drawn</p> <p>(part iii) [1 mark] increasing/upward/rising (accept positive if without 'correlation')</p>	<p>4</p>

Question 2 (a) model answer



Question	Mark Scheme	Mark
<p>2 (b)</p>	<p>[1 mark] increases per year (ignore figures)</p>	<p>1</p>

Question	Mark Scheme	Mark
2 (c)	<p>[2 marks] correct reason (does not start from zero/changes exaggerated) and decision (the graph is misleading)</p> <p>OR</p> <p>[1 mark] correct reason</p>	2

Question	Mark Scheme	Mark
2 (d)	<p>[3 marks] 2016 is reliable because it is within the data and 2020 is not reliable because it is outside the data</p> <p>OR</p> <p>[2 marks] 2016 is reliable because it is within the data or 2020 is not reliable because it is outside the data</p> <p>OR</p> <p>[1 mark] 2016 is reliable and 2020 is not reliable</p>	3

Question	Mark Scheme	Mark				
3 (a)	<div data-bbox="272 1395 1134 1485" style="border: 1px solid black; padding: 5px;"> Thursday <table border="1" data-bbox="517 1402 671 1480" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> </div>					1

Question	Mark Scheme	Mark
3 (b)	[1 mark] Demonstrate an understanding that it is hard to use the key.	1

Question 3 (b) model answer

Tuesday shows 32 loaves of bread. This would be very difficult to show because 32 has a remainder 2 when divided by 5.

Question	Mark Scheme	Mark
4 (a)	[1 mark] Correct reason.	1

Question 4 (a) model answer

'Own outright' has the largest sector.

Question	Mark Scheme	Mark
4 (b)	<p>[1 mark] Finding angle of 'Own outright' is 122°</p> $\frac{137}{360} \times 130$ <p>[1 mark] 50 thousand</p>	2

Question	Mark Scheme	Mark
5 (a)	[1 mark] music genre	1

Question	Mark Scheme	Mark
5 (b)	[1 mark] number of band members	1

Question	Mark Scheme	Mark
5 (c)	[2 marks] random starting point between 1 and 3 and select every 3rd person OR [1 mark] random starting point between 1 and 3 or select every 3rd person or both points with missing/incorrect numbers	2

Question	Mark Scheme	Mark
6 (a)	[1 mark] all the students in Liam's school	1

Question	Mark Scheme	Mark
6 (b)	[1 mark] correct definition of convenience or opportunity sampling (sampling first people you see, easiest to access, closest to you, etc)	1

Question	Mark Scheme	Mark
6 (c)	[1 mark] correct disadvantage of convenience sampling (not representative, could be biased)	1

Question	Mark Scheme	Mark
6 (d)	[1 mark for each] maximum 2 marks + easier to analyse responses, create graphs, identify the most popular + there are too few options + students might select more than one option. + students may not be able to select any of the options + “other” should be an option	2

Question 6 (d) model answer

It will make it easy for Liam to analyse the data. There is no 'other' option.

Question	Mark Scheme	Mark
6 (e)	[2 marks] not suitable and the data is qualitative OR [1 mark] not suitable with attempt at reason or the data is qualitative	2

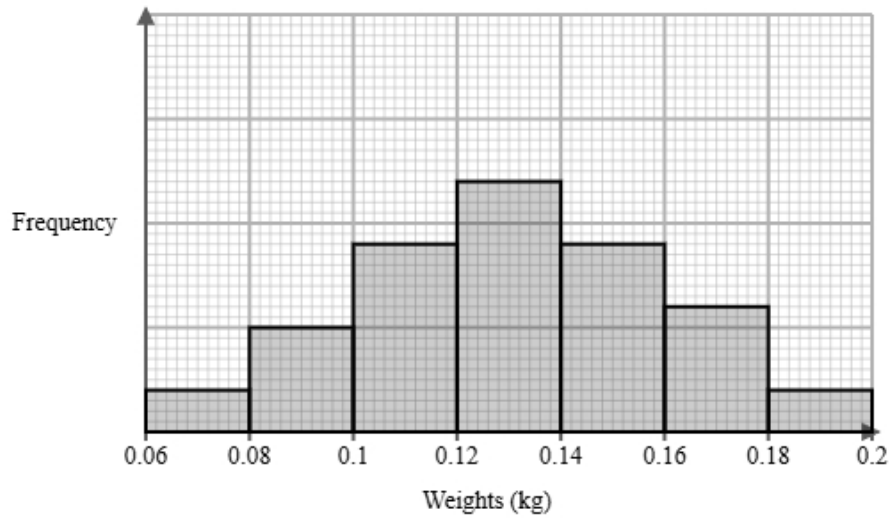
Question	Mark Scheme	Mark
7 (a)	[1 mark] ordinal	1

Question	Mark Scheme	Mark
7 (b)	[1 mark] number to all the people [1 mark] select 10 unique numbers in range [1 mark] select people with corresponding numbers	3

Question	Mark Scheme	Mark
8 (a)	[1 mark] 6 and 2 OR [1 mark] 6 or 2 or evidence of correct scale of frequency axis	2

Question	Mark Scheme	Mark
8 (b)	[2 marks] both bars at correct heights (24 and 18 little squares) OR [1 mark] one correct bar or bars using the scale they have shown	2

Question 8 (b) model answer



Question	Mark Scheme	Mark
8 (c)	[1 mark] negative or negative skew (do not accept negative correlation) [1 mark] correct interpretation (weights above the median have a greater spread or the mean is smaller than the median)	2

Question	Mark Scheme	Mark
8 (d)	[1 mark] correct working to find the mean [1 mark] 129.4 g (assume correct working) [1 mark] Rajesh is incorrect [1 mark] correct limitation of conclusion (difference may be specific to a different field or mean are in same class interval or we do not know the original data)	4

Question 8 (d) model answer

weight w (grams)	Frequency	Midpoint	fw
$80 < w \leq 100$	1	90	90
$100 < w \leq 120$	8	110	880
$120 < w \leq 140$	16	130	2080
$140 < w \leq 160$	9	150	1350
	$\sum f = 34$		$\sum fw = 4400$

$$\sum f = 34$$

$$\sum fw = 4400$$

$$\frac{\sum fw}{\sum f} = \frac{4400}{34}$$

$$= 129.4117\dots$$

$$= 129.4 \text{ g (1 d.p)}$$

Rajesh is incorrect

We cannot be sure because both means are in the same class interval.

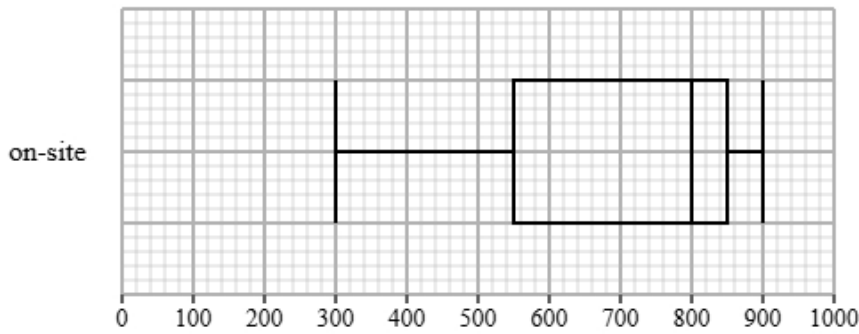
Question	Mark Scheme	Mark
9	<p>[2 marks] $Q_1 = 3.4$ and $Q_2 = 4.5$ and $Q_3 = 5.5$ (accept ± 0.1 with evidence on graph)</p> <p>OR</p> <p>[1 mark] one value correct</p>	2

Question 9 model answer



Question	Mark Scheme	Mark
10 (a)	[1 mark] A box with two whiskers drawn with at least 3 correct values [1 mark] Fully correct	2

Question 10 (a) model answer



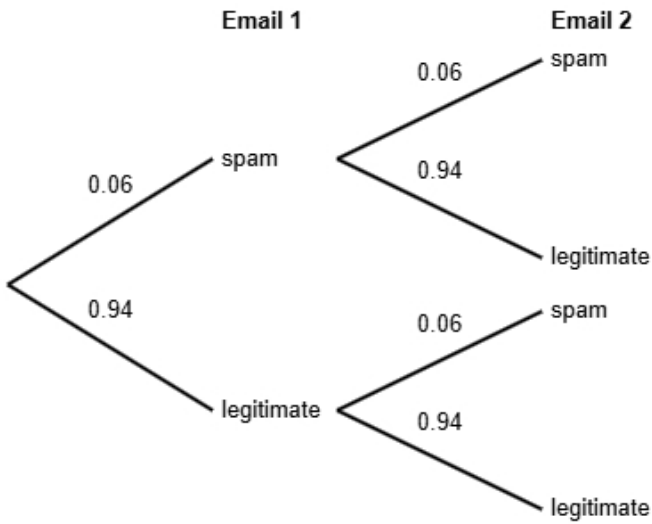
Question	Mark Scheme	Mark
10 (b)	[1 mark] Correct comparison of the medians [1 mark] Correct comparison of the IQR/range [1 mark] Correct comparison of the skews [1 mark] Correct contextual interpretation comparing medians or IQR/ranges or skew	4

Question 10 (b) model answer

The median steps for remote workers is lower than on-site workers. The IQR for the steps of the remote workers is lower than on-site workers. The skew for the steps of the remote workers is symmetrical and the skew for the on-site workers is negative. The remote workers on average walk less than the on-site workers.

Question	Mark Scheme	Mark
11 (a)	[1 mark] 0.94 in correct position for Email 1. [1 mark] 0.06, 0.94, 0.06 and 0.94 in correct positions for Email 2.	2

Question 11 (a) model answer



Question	Mark Scheme	Mark
11 (b)	[1 mark] 0.8836	2

Question	Mark Scheme	Mark
11 (c)	[1 mark] for one correct product using their '0.94' or subtracting a not-wanted product from 1 [1 mark] for 0.1128 or 11.28% [1 mark] for 'correct' ft probability and conclusion based on their probability	3

Question 11 (c) model answer

$$\begin{aligned}
 P(\text{spam AND legitimate}) &= 0.06 \times 0.94 \\
 &= 0.0564
 \end{aligned}$$

$$\begin{aligned}
 P(\text{exactly one email is spam}) &= 0.0564 \times 2 \\
 &= 0.1128
 \end{aligned}$$

$$0.1128 = 11.28\%$$

$$11.28\% < 12\%$$

The probability that exactly one email is spam is less than 12%, so Maria is correct.

Question	Mark Scheme	Mark
12 (a)	[1 mark] 4 gears has the highest frequency.	1

Question	Mark Scheme	Mark
12 (b)	<p>[3 marks] all values correct (7, 14, 8, 18, 17)</p> <p>OR</p> <p>[2 marks] one value correct</p> <p>OR</p> <p>[1 mark] evidence of correct calculation (e.g. $\frac{1}{25}$ or 25 or $\frac{1600}{64}$ or $\frac{64}{1600}$)</p>	3

Question 12 (b) model answer

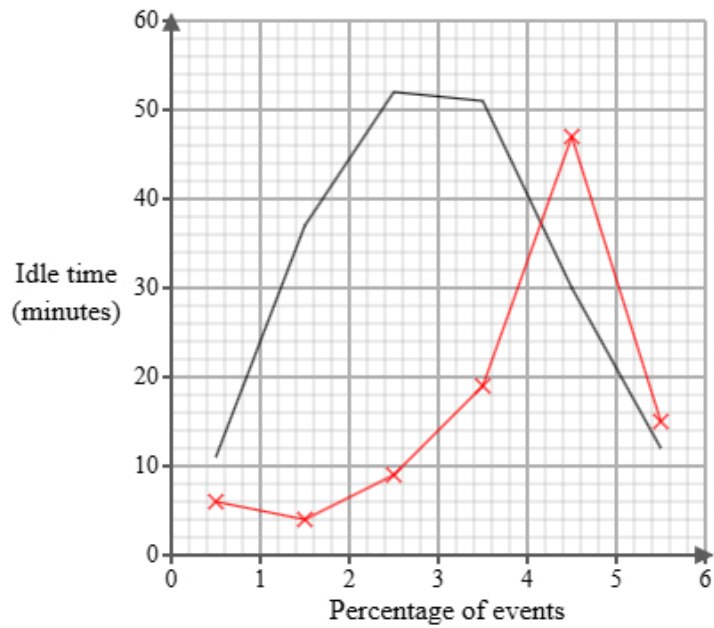
$$\frac{1600}{64} = 25$$

gear types	number of bicycles in the sample
1	$175 \div 25 = 7$
2	$350 \div 25 = 14$
3	$200 \div 25 = 8$
4	$450 \div 25 = 18$
5 or more	$425 \div 25 = 17$

Question	Mark Scheme	Mark
12 (c)	<p>[1 mark] Use a sampling frame for each strata</p> <p>[1 mark] select bicycles randomly</p> <p>[1 mark] description of method of random selection (how random numbers can be used)</p>	3

Question	Mark Scheme	Mark
<p>13</p>	<p>Part i</p> <p>[2 marks] fully correct frequency polygon joined with straight lines</p> <p>OR</p> <p>[1 mark] correct points not joined with straight lines or 3 correct points joined with straight lines</p> <p>Part ii</p> <p>[1 mark] the distribution of delivery vehicle idle times at a rival firm is symmetrical whereas the distribution of delivery vehicle idle times for Tom's company is negatively skewed</p> <p>[1 mark] this means that idle times for the rival firm were equally spread out on either side of the median and idle times for the for Tom's company were mainly at the upper end of the distribution</p>	<p>4</p>

Question 13 model answer



Question	Mark Scheme	Mark
<p>14</p>	<p>[1 mark] $\frac{3.99}{2.81} \times 100$ or $\frac{5.97}{2.81} \times 100$ or $2.81 \times \frac{145}{100}$ or $2.81 \times \frac{177}{100}$</p> <p>[1 mark] 141.99... or 4.07...</p> <p>[1 mark] 212.45... or 4.97...</p> <p>[1 mark] between Jan 1990 and Jan 2000 the change in price was less than the RPI</p> <p>[1 mark] between Jan 1990 and Jan 2010 the change in price was more than the RPI</p>	<p>5</p>

Question	Mark Scheme	Mark
<p>15</p>	<p>[1 mark each] maximum 5 marks</p> <ul style="list-style-type: none"> + both houses decrease in selling price as the distance from city centre increase + detached houses reduces in selling price by £5000 per km + semi-detached houses reduces in selling price by £4200 per km + house type Detached houses reduces in selling price more per km than house type Semi-detached houses + house type Detached houses has a greater initial selling price + a comparison between the house types for a specific distance from city centre 	<p>5</p>