

Statistics GCSE

Paper 2

Edexcel Foundation - 2026

Foundation Tier

Variant 2

1ST0/2F

# Mark scheme

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<b>Question</b>	<b>Mark Scheme</b>	<b>Mark</b>
<b>1 (a)</b>	[1 mark] evens	<b>1</b>

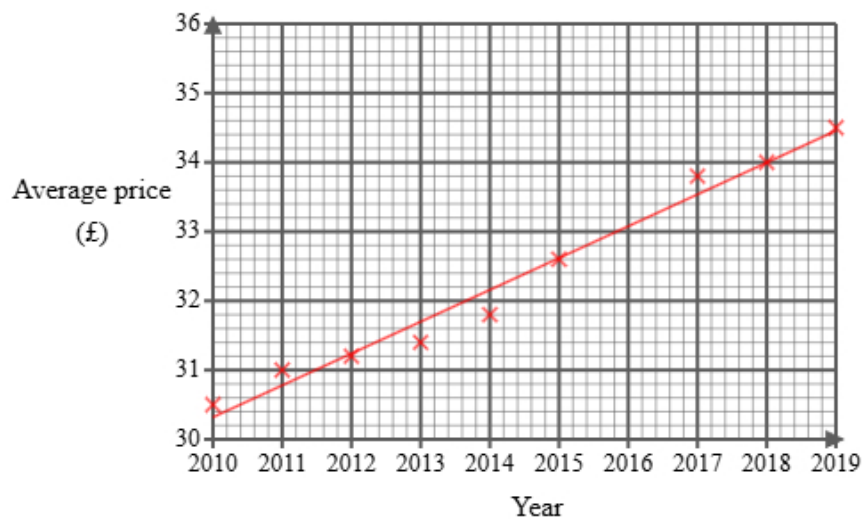
<b>Question</b>	<b>Mark Scheme</b>	<b>Mark</b>
<b>1 (b)</b>	[1 mark] impossible	<b>1</b>

<b>Question</b>	<b>Mark Scheme</b>	<b>Mark</b>
<b>1 (c)</b>	[1 mark] B	<b>1</b>

<b>Question</b>	<b>Mark Scheme</b>	<b>Mark</b>
<b>1 (d)</b>	[1 mark] F	<b>1</b>

Question	Mark Scheme	Mark
<p><b>2 (a)</b></p>	<p>(part i) [2 marks] all <b>three</b> points plotted correctly <b>OR</b> [1 mark] at least <b>one</b> 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><b>4</b></p>

**Question 2 (a) model answer**



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

Question	Mark Scheme	Mark
2 (c)	<p>[2 marks] correct reason (does not start from zero/changes exaggerated) <b>and</b> decision (the graph is misleading)</p> <p><b>OR</b></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 <b>and</b> 2020 is not reliable because it is outside the data</p> <p><b>OR</b></p> <p>[2 marks] 2016 is reliable because it is within the data <b>or</b> 2020 is not reliable because it is outside the data</p> <p><b>OR</b></p> <p>[1 mark] 2016 is reliable <b>and</b> 2020 is not reliable</p>	3

Question	Mark Scheme	Mark								
3 (a)	<div style="border: 1px solid black; padding: 5px; display: flex; align-items: center;"> <span data-bbox="272 1397 512 1485" style="margin-right: 10px;">Thursday</span> <table border="1" data-bbox="512 1397 1134 1485" style="border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <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> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> </div>									1

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

**Question 3 (b) model answer**

Monday shows 16 loaves of bread. This would be very difficult to show because 16 has a remainder 1 when divided by 5.

Question	Mark Scheme	Mark
<b>4 (a)</b>	[1 mark] Correct reason.	<b>1</b>

**Question 4 (a) model answer**

'Met aerobic guidelines' has the largest sector.

Question	Mark Scheme	Mark
<b>4 (b)</b>	<p>[1 mark] Finding angle of 'Met aerobic guidelines' is <math>122^\circ</math></p> $\frac{230}{360} \times 56$ <p>[1 mark] 36 million</p>	<b>2</b>

Question	Mark Scheme	Mark
<b>5 (a)</b>	[1 mark] sport type	<b>1</b>

Question	Mark Scheme	Mark
<b>5 (b)</b>	[1 mark] number of players per team	<b>1</b>

Question	Mark Scheme	Mark
<b>5 (c)</b>	[2 marks] random starting point between 1 and 4 <b>and</b> select every 4th person <b>OR</b> [1 mark] random starting point between 1 and 4 <b>or</b> select every 4th person <b>or</b> both points with missing/incorrect numbers	<b>2</b>

Question	Mark Scheme	Mark
<b>6 (a)</b>	[1 mark] <b>all</b> the students in Noah's school	<b>1</b>

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

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

Question	Mark Scheme	Mark
<b>6 (d)</b>	[1 mark for each] <b>maximum 2 marks</b> + 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	<b>2</b>

#### Question 6 (d) model answer

Noah will be able to put the data into a graph very easily. Some students may not have a pet.

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

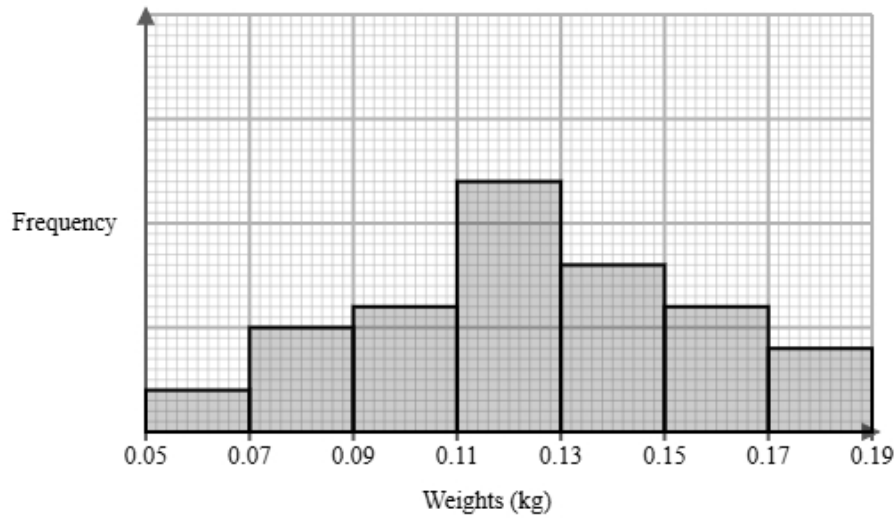
Question	Mark Scheme	Mark
<b>7 (a)</b>	[1 mark] ordinal	<b>1</b>

Question	Mark Scheme	Mark
<b>7 (b)</b>	[1 mark] number to all the people [1 mark] select 20 unique numbers in range [1 mark] select people with corresponding numbers	<b>3</b>

Question	Mark Scheme	Mark
<b>8 (a)</b>	[1 mark] 6 <b>and</b> 4 <b>OR</b> [1 mark] 6 <b>or</b> 4 <b>or</b> evidence of correct scale of frequency axis	<b>2</b>

Question	Mark Scheme	Mark
8 (b)	[2 marks] both bars at correct heights (24 and 16 little squares) <b>OR</b> [1 mark] one correct bar <b>or</b> bars using the scale they have shown	2

Question 8 (b) model answer



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

Question	Mark Scheme	Mark
<b>8 (d)</b>	[1 mark] correct working to find the mean [1 mark] 98.1 g (assume correct working) [1 mark] Eric is incorrect [1 mark] correct limitation of conclusion (difference may be specific to farm plot 2 <b>or</b> mean are in same class interval <b>or</b> we do not know the original data)	<b>4</b>

**Question 8 (d) model answer**

weight $w$ (grams)	Frequency	Midpoint	$fw$
$10 < w \leq 50$	2	30	60
$50 < w \leq 90$	7	70	490
$90 < w \leq 130$	15	110	1650
$130 < w \leq 170$	3	150	450
	$\sum f = 27$		$\sum fw = 2650$

$$\sum f = 27$$

$$\sum fw = 2650$$

$$\frac{\sum fw}{\sum f} = \frac{2650}{27}$$

$$= 98.1481\dots$$

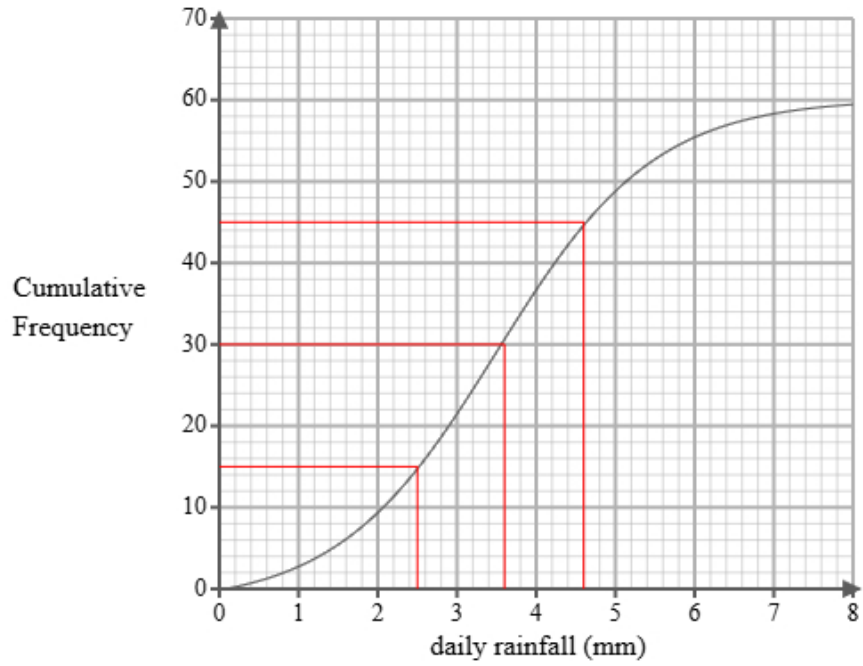
$$= 98.1 \text{ g (1 d.p)}$$

Eric is incorrect

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

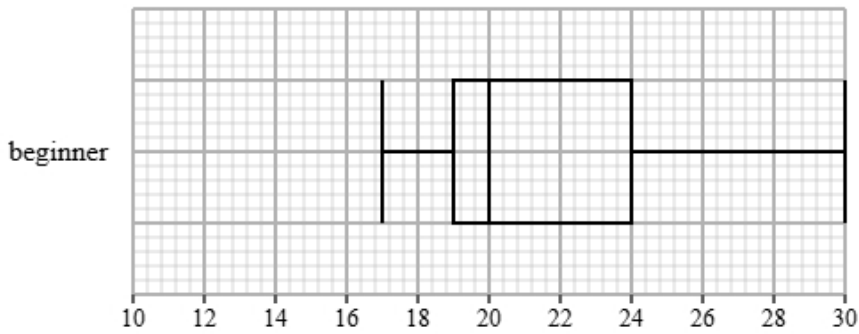
Question	Mark Scheme	Mark
9	<p>[2 marks] <math>Q_1 = 2.5</math> and <math>Q_2 = 3.6</math> and <math>Q_3 = 4.6</math> (accept <math>\pm 0.1</math> with evidence on graph)</p> <p><b>OR</b></p> <p>[1 mark] one value correct</p>	2

**Question 9 model answer**



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

**Question 10 (a) model answer**



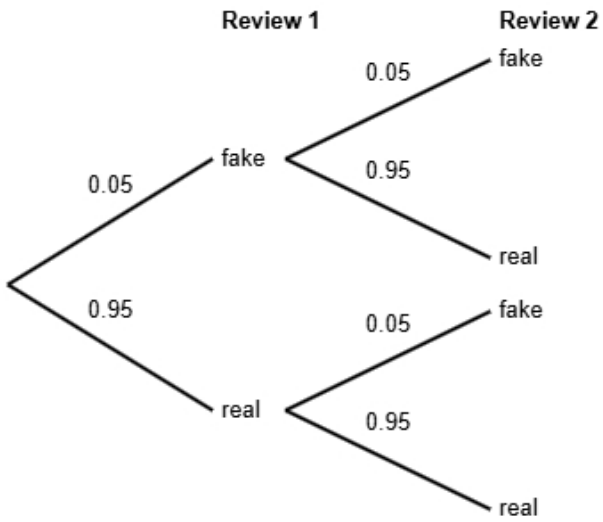
Question	Mark Scheme	Mark
<b>10 (b)</b>	[1 mark] Correct comparison of the medians [1 mark] Correct comparison of the IQR/range [1 mark] Correct comparison of the skews [1 mark] Correct contextual interpretation comparing medians or IQR/ranges or skew	<b>4</b>

**Question 10 (b) model answer**

The median completion times for pro runners is lower than beginner runners. The IQR for the completion times of the pro runners is lower than beginner runners. The skew for the completion times of the pro runners is symmetrical and the skew for the beginner runners is positive. The pro runners are on average faster than the beginner runners.

Question	Mark Scheme	Mark
<b>11 (a)</b>	[1 mark] 0.95 in correct position for Review 1. [1 mark] 0.05, 0.95, 0.05 and 0.95 in correct positions for Review 2.	<b>2</b>

**Question 11 (a) model answer**



Question	Mark Scheme	Mark
<b>11 (b)</b>	[1 mark] 0.9025	<b>2</b>

Question	Mark Scheme	Mark
<b>11 (c)</b>	[1 mark] for one correct product using their '0.95' or subtracting a not-wanted product from 1 [1 mark] for 0.095 or 9.5% [1 mark] for 'correct' ft probability and conclusion based on their probability	<b>3</b>

**Question 11 (c) model answer**

$$P(\text{fake AND real}) = 0.05 \times 0.95$$

$$= 0.0475$$

$$P(\text{exactly one reviews is fake}) = 0.0475 \times 2$$

$$= 0.095$$

$$0.095 = 9.5\%$$

$$9.5\% < 10\%$$

The probability that exactly one reviews is fake is less than 10%, so Emma is correct.

Question	Mark Scheme	Mark
<b>12 (a)</b>	[1 mark] 3 rooms has the highest frequency.	<b>1</b>

Question	Mark Scheme	Mark
<b>12 (b)</b>	<p>[3 marks] all values correct (15, 12, 33, 8, 12)</p> <p><b>OR</b></p> <p>[2 marks] one value correct</p> <p><b>OR</b></p> <p>[1 mark] evidence of correct calculation ( e.g. <math>\frac{1}{15}</math> or 15 or <math>\frac{1200}{80}</math> or <math>\frac{80}{1200}</math> )</p>	<b>3</b>

**Question 12 (b) model answer**

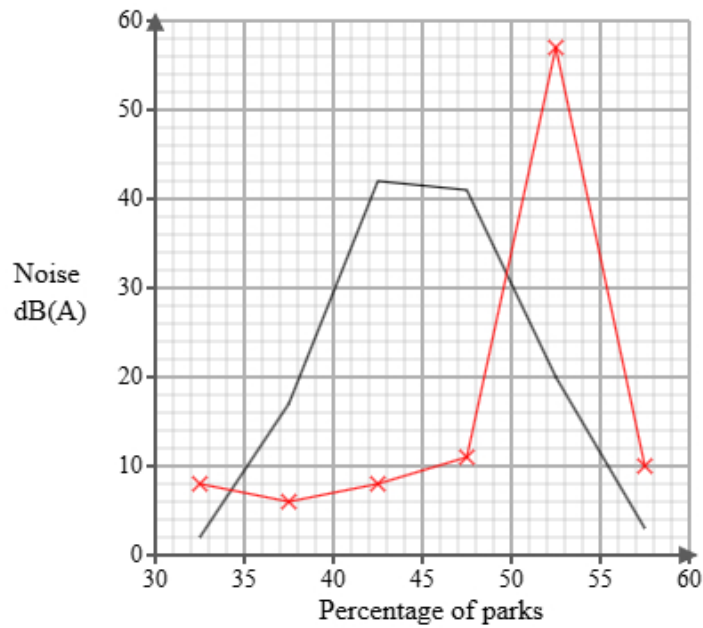
$$\frac{1200}{80} = 15$$

number of rooms	number of apartments in the sample
1	$225 \div 15 = 15$
2	$180 \div 15 = 12$
3	$495 \div 15 = 33$
4	$120 \div 15 = 8$
5 or more	$180 \div 15 = 12$

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

Question	Mark Scheme	Mark
<p><b>13</b></p>	<p><b>Part i</b></p> <p>[2 marks] fully correct frequency polygon joined with straight lines</p> <p><b>OR</b></p> <p>[1 mark] correct points not joined with straight lines <b>or</b> 3 correct points joined with straight lines</p> <p><b>Part ii</b></p> <p>[1 mark] the distribution of noise levels in residential streets is symmetrical whereas the distribution of noise levels in urban parks is negatively skewed</p> <p>[1 mark] this means that in residential areas the noise levels were equally spread out on either side of the median and in urban parks the noise levels were mainly at the upper end of the distribution</p>	<p><b>4</b></p>

**Question 13 model answer**



Question	Mark Scheme	Mark
<b>14</b>	<p>[1 mark] <math>\frac{5.15}{4.57} \times 100</math> <b>or</b> <math>\frac{7.35}{4.57} \times 100</math> <b>or</b> <math>4.57 \times \frac{116}{100}</math> <b>or</b> <math>4.57 \times \frac{149}{100}</math></p> <p>[1 mark] 112.69... <b>or</b> 5.3...</p> <p>[1 mark] 160.83... <b>or</b> 6.8...</p> <p>[1 mark] between Jan 1995 and Jan 2005 the change in price was less than the CPI</p> <p>[1 mark] between Jan 1995 and Jan 2015 the change in price was more than the CPI</p>	<b>5</b>

Question	Mark Scheme	Mark
<b>15</b>	<p>[1 mark each] <b>maximum 5 marks</b></p> <ul style="list-style-type: none"> <li>+ both bicycles decrease in resale price as the distance travelled increase</li> <li>+ type A reduces in resale price by £15 per km</li> <li>+ type B reduces in resale price by £10 per km</li> <li>+ type A reduces in resale price more per km than type B</li> <li>+ type B has a greater initial resale price</li> <li>+ a comparison between the types for a specific distance travelled</li> </ul>	<b>5</b>