| Paper: 1MA1/1H | | | | |
|---|---|---|---|---|
| Question | Working | Answer | Mark | Notes |
| 1 (a) | | 10,19 | B1 | cao |
| (b) | | positive | C1 | positive (correlation) |
| **Q1** (c) | | 12 to 13 | M1 | for an appropriate line of best fit drawn, or a point marked at ($x$, 16.4) or a horizontal line drawn from 16.4 across to ( $x$, 16.4) where $x$ is in the range 12 to 13 |
| | | | A1 | hours given in the range 12 to 13 |
| (d) | | explanation | C1 | (yes) e.g. as the majority of points for high temperature appear when there are more hours of sunshine (positive correlation) |

| Paper: 1MA1/3H | | | | | |
|---|---|---|---|---|---|
| **Question** | | **Answer** | **Mark** | **Mark scheme** | **Additional guidance** |
| 1 | (a) | negative | B1 | cao | Ignore any description of a relationship and any reference to strength of correlation |
| **Q2** | (b) | Explanation | C1 | for a correct explanation,<br>eg "not in line with the trend of the other points"<br>    "does not fit in with the correlation"<br>    "is far away from the other points or line of best fit" | |
| | (c) | Comment | C1 | for an explanation<br>eg "point would be outside of the range of the scatter diagram" | |

| Paper: 1MA1/3H | | | | |
|---|---|---|---|---|
| **Question** | **Answer** | **Mark** | **Mark scheme** | **Additional guidance** |
| 1 (a) | (100,18) | B1 | cao | |
| (b) | 12.8 to 14.8 | M1 | for a method to read off eg line of best fit **or** line up from 370 <br> **or** for a point on the grid at (370, *y*) where *y* lies between 12.8 and 14.8 | |
| | | A1 | for an answer in the range 12.8 to 14.8 | |
| **Q3** (c) | Decision and statement | C1 | for decision and statement <br><br> **Acceptable examples** <br> No, as this point can be disregarded from the general trend <br> No, ignore this point <br> No, the correlation is positive <br> No, because even with an outlier you can still have a negative or positive correlation. <br> No, there is still a correlation. <br> No, as you can use the rest of the data to determine a correlation. <br> No, as outlier does not affect the majority <br> No as a line of best fit can still be drawn <br> No, it is an anomaly <br><br> **Not acceptable examples** <br> Yes, …. <br> Outliers can be ignored [no decision] <br> No, the outlier can be ignored so the correlation is negative <br> No there are other things that can affect the test | |

| Paper: 1MA1/2H | | | | |
|---|---|---|---|---|
| Question | Answer | Mark | Mark scheme | Additional guidance |
| 2<br><br>**Q4** | statements | C1 | for lobf incorrect<br><br>**Acceptable examples**<br>lobf<br>lobf does not suit all points/not a lobf<br>lobf wrong since hits $x$ axis/is inaccurate/should be amongst the crosses<br>lobf goes through the origin/through one point<br>**Not acceptable examples**<br>no correlation/there is no title | |
| | | C1 | for height scale not linear<br><br>**Acceptable examples**<br>150 missing<br>Height not linear / Height numbers going up wrong<br>**Not acceptable examples**<br>150<br>graph does not start at 140/graph does not start at 0<br>height should start at 170 | |

| Paper: 1MA1/3H | | | | |
|---|---|---|---|---|
| **Question** | **Answer** | **Mark** | **Mark scheme** | **Additional guidance** |
| 3 | 35 to 42 | M1 | for drawing a suitable line of best fit **or** for a line from $x = 34$ **or** for a point marked on the grid at $(34, y)$, $y$ in the range 33 to 44 | Line at $x = 34$ does not have to be full length of grid but should be in or reach the data set. Acceptable values for the data set are $y = 33$ to $y = 44$ |
| **Q5** | | A1 | answer in the range 35 to 42 | |

| Paper: 1MA1/2H | | | | |
|---|---|---|---|---|
| **Question** | **Answer** | **Mark** | **Mark scheme** | **Additional guidance** |
| 1 (a) | (2, 1) | B1 | cao | |
| (b) Q6 | Description | C1 | correct description, eg as the amount of rainfall decreases the number of hours of sunshine increases | Accept negative correlation Ignore any comment about strength Any numbers used in the description must be within tolerance |
| (c) | 3 to 4 | M1 | for a suitable line of best fit drawn, **or** for a point marked at ($x$, 7), **or** a horizontal line drawn from 7 across to ($x$, 7) where $x$ is in the range 2.5 to 4 | |
| | | A1 | answer in the range 3 to 4 | |