

| | | | |
|-------------|--|------|---|
| 1(a) | Positive | B1 | accept +ve or + |
| | Additional Guidance | | |
| | Ignore any reference to the strength of the correlation | | |
| | As one jump increases so does the other so positive | | B1 |
| | As one jump increases so does the other | | B0 |
| 1(b) | Straight line of best fit passing through (150, [504, 512]) and (180, [550, 558]) | B1 | accept if clear intention to draw a straight line ignore anything either side of the gates |
| | Correct reading $\pm \frac{1}{2}$ square for their straight line of best fit | B1ft | ft straight line with positive gradient accept if clear intention to draw a straight line ignore any working lines on the graph |
| | Additional Guidance | | |
| | No line of best fit | | B0B0ft |
| | Short straight line with positive gradient and correct reading $\pm \frac{1}{2}$ square for their line | | B0B1ft |
| | Two lines of best fit, mark the line that leads to their answer | | |
| | Two lines of best fit, no answer, apply the usual rules of choice | | |

| | | | |
|------|--|----|---|
| 1(c) | Valid reason | B1 | eg 195 cm is outside the range of values or cannot extrapolate |
| | Additional Guidance | | |
| | Allow '195' or 'his jump' or 'it' to represent 195 cm | | |
| | B1 responses - do not allow points/data/plots/results to be replaced by graph or line | | |
| | 195 exceeds the data | B1 | |
| | It is beyond/outside the data | B1 | |
| | 195 is higher than 185 | B1 | |
| | Nobody else jumped that high | B1 | |
| | His jump is more than the others | B1 | |
| | The correlation stops at 560 | B1 | |
| | All the other points/data/plots/results are less than 195 | B1 | |
| | The points/data/plots/results don't reach 195 | B1 | |
| | The points/data/plots/results don't reach that far | B1 | |
| | The points/data/plots/results stop at 185 | B1 | |
| | The pattern/trend/correlation may change after the points/data/plots/results | B1 | |
| | The pattern/trend/correlation may change | B0 | |
| | It doesn't fit the pattern/trend/correlation | B0 | |
| | Line is not long enough | B0 | |
| | No points at/near/around/close to 195 | B0 | |
| | 195 is anomalous or 195 is an outlier | B0 | |
| | Not enough data | B0 | |
| | This data is not on the graph | B0 | |
| | It is too different to the other points | B0 | |
| | Ignore extra statements that do not contradict a valid reason | | |

| Q | Answer | Mark | Comments |
|------|--|------|--|
| 2(a) | Negative | B1 | ignore descriptive words eg strong |
| | Additional Guidance | | |
| | Description of relationship only eg as the car gets older the value goes down | | B0 |
| | | | |
| Q | Answer | Mark | Comments |
| 2(b) | 4000 | B1 | |
| | Additional Guidance | | |
| | (3, 4000) | | B0 |
| | | | |
| Q | Answer | Mark | Comments |
| 2(c) | [15 000, 15 400] | B1 | |
| | | | |
| Q | Answer | Mark | Comments |
| 2(d) | 2012 | B2 | B1 horizontal line at $5600 \pm \frac{1}{2}$ small square or [6.8, 7.2] implied by mark in correct place on line or horizontal axis |
| | Additional Guidance | | |
| | 2012 and 7 on answer line | | B2 |

| Q | Answer | Mark | Comments |
|------|---|------|---|
| 3(a) | Strong positive | B1 | |
| | | | |
| Q | Answer | Mark | Comments |
| 3(b) | Straight line of best fit passing through (5, [18k, 24k]) and (23, [42k, 48k]) | B1 | mark intention of straight line ignore anything beyond gates |
| | Correct reading $\pm \frac{1}{2}$ square for their straight line of best fit | B1ft | ft their straight line with positive gradient ignore any working lines on the graph condone thousands missing may be implied by correct number of lives for their line |
| | Correct evaluation of their answer in thousands divided by 2000 | B1ft | ft their reading from straight line but must be in thousands condone half a life (or rounded or truncated) if reading is an odd number of thousands |
| | Additional Guidance | | |
| | (their correct line of best fit would give a reading of 34 000) Answer 17 Answer 0.017 (Points \Rightarrow) 33 000, answer 16 (within half a square, answer truncated) (Points \Rightarrow) 32 000, answer 16 | | B1B1B1 B1B1B0 B1B1B1 B1B0B1ft |
| | For two lines of best fit with no answer, take as choice | | |

| Q | Answer | Mark | Comments |
|------|--|------|---|
| 4(a) | Valid description | B1 | eg as height increases so does mass or as mass decreases so does height |
| | Additional Guidance | | |
| | Ignore incorrect or irrelevant statements alongside correct statements, unless contradictory | | |
| | As one increases so does the other | B1 | |
| | It is usually heavier the taller it is | B1 | |
| | As height increases the weight increases | B1 | |
| | They are directly proportional (condone) | B1 | |
| | It is positive correlation because the taller the dogs the heavier the dogs | B1 | |
| | The taller they are the more they weigh | B1 | |
| | Taller dogs are heavier | B1 | |
| | The tallest dogs have more mass than the shorter dogs | B1 | |
| | The shortest dogs have a lower mass | B1 | |
| | Mass and height both increase at the same time (condone) | B1 | |
| | The height and mass of the dogs increase at the same rate (condone) | B1 | |
| | A tall dog is heavy | B0 | |
| | The bigger they are the more they weigh (height is not implied from bigger) | B0 | |
| | It is heavier as it grows (height is not implied from growth) | B0 | |
| | It is positive correlation | B0 | |

| Q | Answer | Mark | Comments |
|------|--|------|---|
| 4(b) | Straight line passing through (36, [9,13]) and (62, [30, 34]) | B1 | accept intention to draw a straight line ignore anything outside (36, [9,13]) and (62, [30, 34]) |
| | Correct reading $\pm \frac{1}{2}$ square for their straight line | B1ft | ft their line with positive gradient ignore any working lines on their graph |
| | Additional Guidance | | |
| | No line of best fit | | B0B0 |
| | Short straight line not passing through (36, [9,13]) and (62, [30, 34]) with positive gradient and correct reading $\pm \frac{1}{2}$ square for their line | | B0B1ft |
| | Two lines of best fit, mark the line that leads to their answer | | |
| | Two lines of best fit, no answer, apply the usual rules of choice | | |

| Q | Answer | Mark | Comments |
|------|-------------------------------|------|--------------------------|
| 5(a) | Distance (km) | B1 | oe must have units |
| | (8, 38) and (8.5, 42) plotted | B1 | $\pm \frac{1}{2}$ square |
| | Additional Guidance | | |
| | Ignore any lines | | |
| | Ignore other plots | | |

| Q | Answer | Mark | Comments |
|------|----------|------|---|
| 5(b) | Positive | B1 | oe |
| | Strong | B1 | oe eg fairly strong SC1 answers in reverse order |