

1(a)	Positive	B1	accept +ve or +
	<b>Additional Guidance</b>		
	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
	<b>Additional Guidance</b>		
	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
	<b>Additional Guidance</b>		
	Allow '195' or 'his jump' or 'it' to represent 195 cm		
	B1 responses - do <b>not</b> 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	
	<b>Additional Guidance</b>			
	Description of relationship only eg as the car gets older the value goes down		B0	
Q	Answer	Mark	Comments	
2(b)	4000	B1		
	<b>Additional Guidance</b>			
	(3, 4000)		B0	
Q	Answer	Mark	Comments	
2(c)	[15 000, 15400]	B1		
Q	Answer	Mark	Comments	
2(d)	2012	B1 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	
	<b>Additional Guidance</b>			
	2012 and 7 on answer line		B2	

Q	Answer	Mark	Comments
3(a)	Strong positive	B1	
Q	Answer	Mark	Comments
	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
3(b)	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 =) 33 000, answer 16 (within half a square, answer truncated) (Points =) 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	
	<b>Additional Guidance</b>			
	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
	<b>Additional Guidance</b>		
	No line of best fit		
	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		
	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
	<b>Additional Guidance</b>		
	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