

Question	Scheme	Marks	AOs
2(a)(i)	Extrapolation is making predictions outside the original data range.	B1	1.2
(a)(ii)	This is unreliable as the trend may not continue.	B1	2.4
		(2)	
(b)	The product moment correlation coefficient cannot be greater than 1	B1	1.2
		(1)	
(c)	$r = 0.76279 \dots$ awrt 0.763	B1	1.1b
		(1)	
(d)	$H_0: \rho = 0$ $H_1: \rho > 0$	B1	2.5
	Critical value 0.7155	M1	1.1a
	Reject $H_0$		
	There is evidence that the product moment correlation coefficient is greater than 0	A1ft	2.2b
		(3)	
(e)	This suggests that on average (female hook-billed) kites with longer tails have longer wings.	B1	3.2a
		(1)	
<b>(8 marks)</b>			

<b>Notes:</b>
(a) B1: for a correct definition of extrapolation B1: for a correct statement of the dangers of extrapolation
(b) B1: for a correct statement
(c) B1: for awrt 0.763
(d) B1: for both hypotheses in terms of $\rho$ M1: for selecting a suitable 1% critical value compatible with their $H_1$ A1: for correct conclusion stated ft their (c) provided $-1 \leq r \leq 1$
(e) B1: for correct interpretation in context ft their (d) provided $-1 \leq r \leq 1$