

Question	Scheme	Marks	AOs
3(a)	tr	B1	1.2
		(1)	
(b)(i)	$\mu = \frac{174.9}{31} = 5.6419...$ awrt 5.64	B1	1.1b
(ii)	$\sigma_r = \sqrt{\frac{3523.283}{31} - \mu^2}$	M1	1.1b
	= 9.04559... awrt 9.05	A1	1.1b
		(3)	
(c)	Leuchars is in the North and Camborne is in the South	M1	2.4
	The mean is smaller for Leuchars than Camborne therefore there is no evidence that Dian's belief is true	A1ft	2.2b
		(2)	
(d)	eg $p = 0.27$ is unlikely to be constant.	B1	2.4
		(1)	

(7 marks)

Notes:		
(a)	B1	Allow Tr or trace or Trace
(b)(i)	B1	For a correct mean awrt 5.64
(ii)	M1	For a correct expression for sd including the $\sqrt{}$ Ft their mean
	A1	awrt 9.05 (Allow $s = 9.1932...$ awrt 9.19) NB awrt to 9.05 or 9.19 with no working is M1 A1
(c)	M1	For stating Leuchars is North of Camborne oe eg Camborne is further south
	A1ft	M1 must be awarded. A correct conclusion and correct comment about the means ft their mean in (b) Allow No
	SC	for No and there are only 2 places used so there is insufficient data. Mark as M0A1 on open
(d)	B1	A correct reason referring to - independence (needs context as to what is independent) eg consecutive 14 days unlikely to be independent. - probability [of rain] not being constant. - Allow a comment that conveys the idea that the proportion of days with no rain will be different over the year.