

Question	Scheme	Marks	AOs
3(a)(i) (ii)	P(NNE) = 1/16 oe	B1	1.1b
	(Discrete) uniform distribution	B1	1.2
		(2)	
(b)	e.g. lds only gives data for months May to October or lds only gives data for 2 specific years	B1	2.4
		(1)	
(c)	Any two from eg		
	Create numbered list or sampling frame of days of the year	B1	1.1b,
	Use random number generator/table to select 36 numbers	B1	1.1b
	In the range 001 to 365 (or 366) ignoring others/repeats		
		(2)	
(d)(i) (ii)	$H_1 : p \neq 0.25$	B1	2.2a
	Test statistic is in critical region so evidence to reject H_0	M1	1.1b
	e.g. Significant evidence that the daily mean wind directions are not all equally likely (oe)	A1ft	3.5a
		(3)	
(8 marks)			

Notes:

(a)(i) B1 1/16 or 0.0625 only

(b) accept reference to Sam's investigation of weather **throughout the year**

(c) any 2 valid steps. Accept numbering eg 000 to 364 etc

(d) A1ft requires valid comment in context, ft their H_1 , Accept eg P(wind between 135° and 225°) $\neq 0.25$, but not just $p \neq 0.25$, needs context.