Q	Marking instructions	AO	Marks	Typical solution
17	States both hypotheses using correct notation. If a letter other than p is used, it must be correctly defined Accept 8% for 0.08	2.5	B1	
	States model used PI by P($X \geq 7$) = 0.10 P($X \geq 8$) = 0.04 P($X \leq 6$) = 0.90 P($X \leq 7$) = 0.96 AWRT Condone incorrect inequalities Condone P($X = 7$) = 0.06 P($X = 8$) = 0.03 AWRT as evidence of use	1.1a	M1	X is 'Number of vegan customers at the café' H_0: $p = 0.08$ H_1: $p > 0.08$ Under H_0: $X \sim B(50, 0.08)$
	Obtains 0.10 AWRT Condone 0.04 for A1 AWRT Or Critical region reject H_0 if $X \geq 8$ OE	1.1b	A1	$P(X \geq 7) = 1 - P(X \leq 6)$ $= 1 - 0.898128\ldots$ $= 0.102$ As $0.102 > 0.05$
	Compares 0.102 AWRT to 0.05 and states H_0 is not rejected. Or Compares 7 with critical region and states H_0 is not rejected. Condone accept H_0 and Reject H_1 Must see clear comparison	2.2b	A1	Do not reject H_0 There is insufficient evidence to suggest that the proportion of vegan customers at the café is greater than 8%.
	Concludes, from a fully correct comparison, in context, by referring to the proportion of vegan customers being greater than 8% OE Only award if B1 M1 A1 A1 Must not be too definite e.g. Use of 'insufficient', 'not significant', 'not enough'	3.2a	R1	
	Question 17 Total		**5**	