Question Number	Answer		Mark
12	Position A: Constructive (superposition)	(1)	
	Position B: Destructive (superposition)	(1)	
	Constructive is when: waves are in phase **Or** path difference is λ	(1)	
	Destructive is when: waves are in antiphase **Or** path difference is $3\lambda / 2$	(1)	4
	(MP3 and MP4 are not dependent upon MP1 and MP2) (MP3 – accept phase difference of 2π radians or $360°$) (MP4 – accept phase difference of π radians or $180°$). (Phase difference must refer to an angle, path difference to a distance) (MP3 – allow path difference of $n\lambda$) (MP4 – allow path difference of $\lambda/2$ or $(n + ½)\lambda$) (MP4 – do not allow out of phase) (Ignore references to nodes and antinodes)		
	Total for Question 12		4