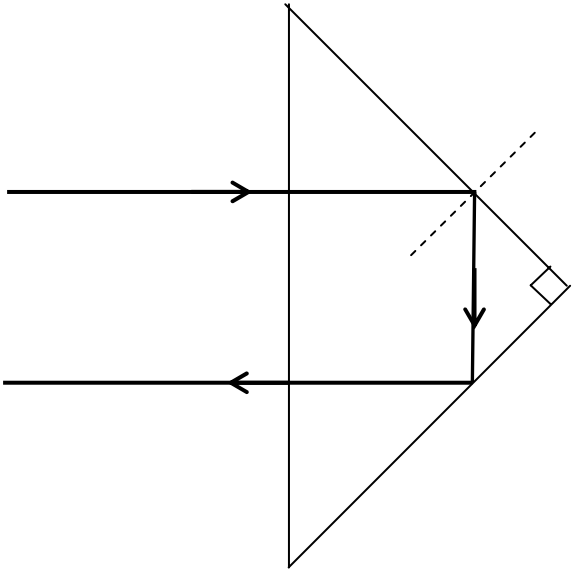


Question number	Answer	Notes	Marks
2 (a) (i)	total; internal; (reflection)	ACCEPT TIR for 2 marks 'total <u>refraction</u> ' = 1, 'internal <u>refraction</u> ' = 1 'total internal <u>refraction</u> ' = 1 (list principle) 'reflection' alone = 0	1 1
(ii)	Any ONE of (Angle of) reflection ; $\theta > \text{critical angle}$ ; 45° / 45 degrees / 45	ANSWER may be given on the DIAGRAM REJECT single letter 'r' REJECT $\theta = \text{critical angle}$	1
(b)	Internal reflection at Y; Second internal reflection at lower right surface; Approximately correct reflections at both faces and emerging parallel (by eye); 	IGNORE any diagram arrows	3

Total 6 Marks