

Question			Answer	Max mark	Additional guidance
3.	(a)	(i)	$v = u + at$	1	u and a must have opposite signs Accept $0 = 5.6 - 9.8t$ Accept 0.6, 0.571, 0.5714 Alternative method: $v^2 = u^2 + 2as$ $0^2 = 5.6^2 + 2 \times (-9.8) \times s$ $s = 1.6 \text{ (m)}$ $s = \frac{1}{2}(u + v)t$ $1.6 = \left(\frac{5.6 + 0}{2}\right)t$ $t = 0.57 \text{ s}$ If an alternative method is used, 1 mark for ALL equations 1 mark for ALL substitutions 1 mark for correct answer If candidate answers question in terms of an object falling from the max height and reaching a velocity of 5.6ms^{-1}, then a suitable justification MUST be given to allow access to 2nd and 3rd marks. A negative value for time is wrong physics - max 1 mark.
			$0 = 5.6 + (-9.8)t$	1	
			$t = 0.57 \text{ s}$	1	

