

Question Number	Answer	Mark
12(a)(i)	(Initial) gradient = 0 Or Tangent horizontal (at $t = 0$) (1)	1
12(a)(ii)	EITHER Draws tangent at (1.5, 0.0) (1) $(-)14 \pm 1 \text{ m s}^{-1}$ by graphical method (1) OR <i>suvat</i> method using quantities read from the graph and/or $a = \pm g$. (1) Correct answer from <i>suvat</i> calculation (1)	2
12(b)	Straight line from 0 to (1.5, – [magnitude from (a)(ii)]) (1) Second straight line from end of first line to (2.1, 0.0) (1) [Ignore lines beyond 2.1 s] 	2
Total for question 12		5