Question number	Answer	Notes	Marks
9 (a)	use of $v^2 = u^2 + 2as$; substitution; rearrangement; evaluation; e.g. $v^2 = u^2 + 2as$ $v^2 = (0) + 2 \times 10 \times 2.2$ $v = \sqrt{44}$ (v =) 6.6 (m/s)	seen anywhere in working allow use of g=9.8, 9.81 allow alternative method using $mgh = {}^1/_2mv^2$ final answer of 44 (m/s) is 2 marks only allow 6.63…(m/s), 6.56…(m/s) 6.5 scores 3 marks only	4
(b) (i)	vertical arrow drawn upwards;	ignore labels reject if more than one arrow drawn unless resultant force is clearly labelled	1
(ii)	substitution into F = ma; rearrangement; evaluation; e.g. 18 000 = 4100 × a a = 18 000 / 4100 (a =) 4.4 (m/s^2)	 -1 for POT error allow 4.39…(m/s^2)	3

Total for Question 9 = 8 marks