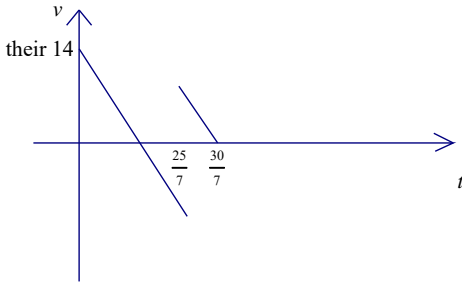


Question Number	Scheme	Marks	Notes
6(a)	$s = ut + \frac{1}{2}at^2$	M1	Complete method using <i>suvat</i> to form equation in <i>U</i> only
	$-12\frac{1}{2} = \frac{25}{7}U - 4.9(\frac{25}{7})^2$	A1	Correct unsimplified equation Allow $12\frac{1}{2} = \frac{25}{7}U + 4.9(\frac{25}{7})^2$ even if it is not clear that they know why it is true
	$U = 14$	A1	Must be positive
		(3)	
(b)	$s = vt - \frac{1}{2}at^2$	M1	Complete method using <i>suvat</i> to form equation in <i>s</i> only
	$s = 0 - \frac{1}{2}(-9.8)(\frac{5}{7})^2$	A1	Correct unsimplified equation
	$= 2\frac{1}{2} \text{ (m)}$	A1	
		(3)	
(b) alt	$0 = u - g(\frac{5}{7}) \quad u = 7$ $s = ut + \frac{1}{2}at^2$	M1	Complete method using <i>suvat</i> to form equation in <i>s</i>
	$s = 7(\frac{5}{7}) - \frac{1}{2}9.8(\frac{5}{7})^2$	A1	Correct unsimplified equation
	$= 2\frac{1}{2} \text{ (m)}$	A1	
		(3)	
(c).		B1	1 st line (existing for both +ve and -ve <i>v</i>) ignore figures
		B1	2 nd line correct and stopping on the <i>t</i> axis. no other lines. Ignore figures. Parallel to upward portion of their first line if seen.
		B1 ft	Figs. In the right places. Allow <i>U</i> for their 14
		(3)	
			Accept mirror image in the <i>t</i> axis
		(9)	