

Question Number	Scheme	Marks
<b>6(a)</b>	$0 = u - 9.8 \times 2.5$ oe using gradient of graph. Allow $g$ or $9.81$ instead of $9.8$	M1
	$u = 24.5$ or $25 \text{ (m s}^{-1}\text{)}$ Allow $2.5g$	A1
	Many other methods	(2)
<b>6(b)</b>	$s = 24.5 \times 2 + \frac{1}{2} \times 9.8 \times 2^2$ <p><b>OR</b></p> $s = 24.5 \times 7 - \frac{1}{2} \times 9.8 \times 7^2$ <p><b>OR</b></p> $s = \frac{1}{2} \times 9.8 \times 4.5^2 - (24.5 \times 2.5 + \frac{1}{2} \times (-9.8) \times 2.5^2)$ <p><b>OR</b></p> $s = \frac{1}{2} \times 9.8 \times 4.5^2 - \frac{1}{2} \times 9.8 \times 2.5^2$ <p>Many other methods, using <i>suvat</i> and/or the graph (e.g. similar triangles and area under graph)</p> <p>Allow <math>g</math> or <math>9.81</math> instead of <math>9.8</math> in all equations.</p>	M1A1ft
	68.6 or 69 (m)	A1
		(3)
		(5)
	<b>Notes for question 6</b>	
	For use of $g = 9.81$ , which will only affect the final A mark in each part, penalise once for whole question	
<b>6(a)</b>	M1 for complete method using <i>suvat</i> or the graph to produce an equation in $u$ only, with correct number of terms, condone sign errors.	
	A1 cao (must be positive)	
<b>6(b)</b>	M1 Complete method to give a final displacement, condone sign errors within a <i>suvat</i> equation.	
	A1ft Correct equation ft on their $u$	
	A1 cao	