

Question Number	Scheme	Marks
<b>3(a)</b>	$7400 - 200 - 6000 = 6000a$ $7400 - 200 - R = 8000a$ Any two of these three equations $6000 - R = 2000a$ <b>N.B.</b> 6000 (N) must be used as the tension to earn an M mark.	M1A1 M1A1
	$R = 5600$	DM1A1
	<b>N.B.</b> If they consistently use tonnes in their equations treat as a MR i.e. max M1A0M1A0M1A1 Wrong figs. for mass, e.g. 6000000 etc or just $m$ , can score M mark in that equation.	
		(6)
<b>3(b)</b>	Same acceleration for the tractor and the block	B1
		(1)
		(7)
	<b>Notes for question 3</b>	
	<b>N.B.</b> Enter marks on ePen in the order in which the equations appear.	
<b>3(a)</b>	M1 Correct no. of terms, condone sign errors (use mass to determine which equation is being attempted)	
	A1 Correct equation	
	M1 Correct no. of terms, condone sign errors	
	A1 Correct equation	
	DM1 Solve for $R$ , dependent on both M marks	
	A1 cao	
<b>3(b)</b>	B1 Any equivalent statement e.g 'both have the same acceleration' but not just 'same acceleration'. Need to say 'both' or mention the tractor and the block. Allow 'they have the same acceleration'. Allow 'same acceleration throughout the system' and 'both particles have the same acceleration'. <b>N.B.</b> B0 if extra wrong answers are included.	