Question Number	Scheme	Marks
3.	Trailer: $2060 - 300 - 400g\sin\alpha = 400a$	M1A2
	Car: $D - 420 - 800g\sin\alpha - 2060 = 800a$	M1A2
Aliter	System: $D - 420 - 800g\sin\alpha - 300 - 400g\sin\alpha = 400a + 800a$ **M1A2**	
	$D = 6000$	A1
	Notes for qu 3	**(7)**
	Use the mass in the *ma* term of an equation to determine to which part of the system the equation applies.	
	First M1 for equation of motion for the trailer, correct no. of terms, with weight resolved, condone sign errors	
	First A2 for a correct equation (including T used for 2060), -1 each error	
	Second M1 for equation of motion for the car, correct no. of terms, with weight resolved, condone sign errors	
	Second A2 for a correct equation (including T used for 2060), -1 each error	
Aliter	**Replace either of the above with an equation of motion for the whole system**	
	M1 for equation of motion for the whole system, correct no. of terms, with both weights resolved, condone sign errors	
	A2 for a correct equation, -1 each error	
	N.B. If g is consistently omitted, this leads to $D = 6000$. This scores max M1A1A0M1A1A0A0	

1