

Question Number	Scheme	Marks
3(a)	$560 - mg = 1.4m$	M1 A1 (2)
(b)	$2800 - Mg - 560 = 1.4M$	M1 A1 (2)
(c) (i)	$560 = 11.2m$ $m = 50$	DM1 A1
(ii)	$2240 = 11.2M$ $M = 200$	A1 (3) <b>7</b>
	<b>Notes</b>	
(a)	M1 for equation of motion for the person only, with usual rules, condone sign errors, and with at least one value (560 or 1.4) substituted. <i>Credit given for this equation only if it appears in (a).</i>	
	A1 for a correct equation	
(b)	M1 for equation of motion for the lift only, with usual rules, condone sign errors, and with at least one value (2800, 560 or 1.4) substituted. <i>Credit given for this equation only if it appears in (b).</i>	
	A1 for a correct equation	
(c)	<b>Hence:</b> DM1, dependent on appropriate previous M mark, for solving one of their equations, <u>wherever it appears</u> , for either $m$ or $M$ <b>Otherwise:</b> DM1, dependent on appropriate previous M mark, for solving one of their equations and/or the whole system equation, <u>wherever they appear</u> , for either $m$ or $M$ <b>N.B.</b> There are no marks available for the whole system equation	
	First A1 for $m = 50$	
	Second A1 for $M = 200$	