

Question Number	Scheme	Marks
3(a)	$560 - mg = 1.4m$	M1 A1 (2)
(b)	$2800 - Mg - 560 = 1.4M$	M1 A1 (2)
(c) (i)	$560 = 11.2m$	DM1
(ii)	$m = 50$ $2240 = 11.2M$ $M = 200$	A1 A1 (3) 7
Notes		
(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>	
(b)	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>	
(c)	A1 for a correct equation	
(c)	Hence: DM1, dependent on appropriate previous M mark, for solving one of their equations, wherever it appears, for either m or M Otherwise: DM1, dependent on appropriate previous M mark, for solving one of their equations and/or the whole system equation, wherever they appear, for either m or M N.B. There are no marks available for the whole system equation	
	First A1 for $m = 50$	
	Second A1 for $M = 200$	