Question Number	Answer		Mark
16(a)	Use of moment $= F\,x$	**(1)**	**3**
	Use of Σ(moments) $= 0$	**(1)**	
	$R_1 = 3.7$ kN **and** $R_2 = 8.6$ kN	**(1)**	
	Example of calculation		
	Taking moments about rear axle:		
	$R_1 = (1.8 \text{ m} \times 1.23 \times 10^4 \text{ N}) / 6 \text{ m} = 3.69 \times 10^3 \text{ N}$		
	Taking moments about the front axle:		
	$R_2 = (4.2 \text{ m} \times 1.23 \times 10^4 \text{ N}) / 6 \text{ m} = 8.61 \times 10^3 \text{ N}$		
16(b)	Use of $\Sigma F = m\,a$	**(1)**	**2**
	$\Sigma F = 6.77 \times 10^4 \text{ N}$	**(1)**	
	Example of calculation		
	$\Sigma F = (1.23 \times 10^4 \text{ N} / g) \times 5.50 \text{ g} = 6.77 \times 10^4 \text{ N}$		
16(c)	Reference to $P = W / t$ **Or** $\Delta W = F\,\Delta s$	**(1)**	**2**
	Force decreases as velocity increases	**(1)**	
	Total for question 16		**7**