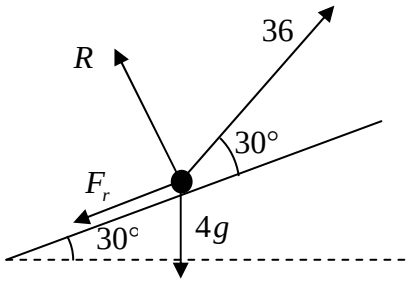
Question Number	Scheme	Marks
8 (a)		
	$R + 36\sin 30° = 4g\cos 30°$	M1 A1
	$R \approx 15.9,\ 16$	M1 A1
		(4)
(b)	Use of $F_r = \mu R$	B1
	$36\cos 30° = F + 4g\sin 30°$	M1 A1
	$\mu = \dfrac{36\cos 30° - 4g\sin 30°}{R} \approx 0.726$	M1 A1
	0.73	
		(5)
(c)	After force is removed	
	$R = 4g\cos 30°$	B1
	$-\mu 4g\cos 30° - 4g\sin 30° = 4a$	M1 A1
	$a = (-)11.06\ ...$	
	$v^2 = u^2 + 2as \Rightarrow 0^2 = 16^2 - 2\times 11.06\ ... \times s$	M1
	$s = \dfrac{16^2}{2\times 11.06\ ...} \approx 11.6 \quad (\text{m})$	A1
	12	
		(5)
		14