

Question	Answer	Marks	Guidance
	Attempt at resolving parallel to the plane	*M1	3 terms. Allow sign errors, sin/cos mix. Allow g missing, otherwise dimensionally correct.
	$65 \cos 36 = 12g \times \sin 24 + F$	A1	$F = 3.777707 \dots$
	Attempt at resolving perpendicular to the plane	*M1	3 terms. Allow sign errors, sin/cos mix. Allow g missing, otherwise dimensionally correct.
	$12g \times \cos 24 = R + 65 \sin 36$	A1	$R = 71.419 \dots$
	Use $F = \mu R$ $\left[\mu = \frac{65 \cos 36 - 12g \times \sin 24}{12g \times \cos 24 - 65 \sin 36} = \frac{52.586 - 48.808}{109.625 - 38.206} = \frac{3.777 \dots}{71.419 \dots} \right]$	DM1	To get an equation in μ only. Dependent on two previous M marks. Allow g missing
	$\mu = 0.0529$	A1	Allow AWRT 0.053 Do not accept fractional equivalent.
		6	