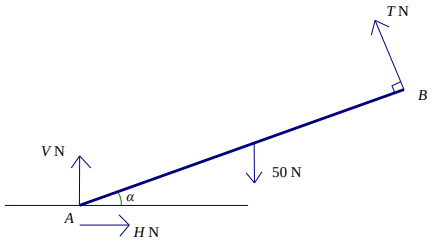
5a			
	Moments about A	M1	Dimensionally correct equation i.e. force x distance = force x distance. Condone sin/cos confusion Mark 50g as an accuracy error
	$4T = 2\cos\alpha \times 50$ $\left(= 2\times\frac{4}{5}\times 50\right)$	A1	Correct unsimplified equation. Need to see $\cos\alpha$ **OR** $\frac{4}{5}$ Might see LHS = $T\cos\alpha\times 4\cos\alpha + T\sin\alpha\times 4\sin\alpha$
	$T = 20$ *	A1*	Obtain **given answer** from correct working. Must see $\frac{4}{5}$ used correctly.
		[3]	
5b	Resolve horizontally	M1	Condone sin/cos confusion
	$H = T\sin\alpha$	A1	Correct equation
	Resolve vertically	M1	Need all 3 terms. Condone sign error and sin/cos confusion.
	$T\cos\alpha + V = 50$	A1	Correct equation
	Either or both of the above equations could be replaced by a moments equation e.g. $\mathrm{M}(B): 4\cos\alpha\times V = 4\sin\alpha\times H + 2\cos\alpha\times 50$ or by resolving perpendicular & parallel to the rod: $T + V\cos\alpha = 50\cos\alpha + H\sin\alpha$ & $50\sin\alpha = H\cos\alpha + V\sin\alpha$		
	Use $F = \mu R$ to form an equation in μ	M1	$(H = \mu V)$ Used, not just stated i.e. they must get as far as substituting their values.
	$\mu = \frac{6}{17}$	A1	$\mu = 0.35$ or better Accept $\frac{12}{34}$
		[6]	
		(9)	