6a	Resolve perpendicular to the plane	M1	Condone sin/cos confusion
	$R = 6g\cos\theta$	A1	Correct resolution
	$F = \frac{1}{4}R = \frac{18g}{13} = 13.6(\text{N})$ or $14(\text{N})$	A1	2 sf or 3 sf for decimal answer
		(3)	
6b	Equation of motion parallel to the plane	M1	Need all terms and dimensionally correct. Condone sign errors and sin/cos confusion.
	$-F - 6g\sin\theta = 6a$	A1	Correct unsimplified equation in F Allow $-6a$ on RHS
	$0 = 5^2 + 2\times as$	M1	Complete method using *suvat* and calculated a ($a \neq g$) to find s This is independent of previous M mark but they must have found a value for a.
	$0 = 5^2 - 2\times\frac{8g}{13}s$	A1	Correct unsimplified equation. Allow ($-s$)
	$s = 2.07(\text{m})$ or $2.1(\text{m})$	A1	Must be positive.
		(5)	
6c	Equation of motion parallel to the plane	M1	Need all terms and dimensionally correct. Condone sign errors and sin/cos confusion.
	$6g\sin\theta - F = 6a'$	A1	Correct unsimplified equation in F
	$5^2 = 0 + 2a's$	M1	Complete method using *suvat*, with $a' \neq a$ and $a' \neq g$ to find s
	$5^2 = 0 + 2\times\frac{2g}{13}\times s$	A1	Correct unsimplified equation
	$8.29(\text{m})$ or $8.3(\text{m})$	A1	
		(5)	
		[13]	