Question Number	Scheme	Marks
4(a)	$(\uparrow)\ R = 5g - 14\sin 30^o$	M1 A1
	R = 42 (N)	A1
	(Max Friction =) $\frac{3}{7} \times 42 = 18$ (N) (18 only, with no working can score this M mark)	M1
	Horiz cpt of P = $14\cos 30^o = 12.124\ldots$ and 12 < 18 (their **max** friction) They must be comparing with a **maximum** friction i.e. the word '**maximum**' oe must have been clearly stated somewhere. **N.B.** M0 if they state or imply that the friction **acting** on the block is 18 N.	M1
	Friction = 12 or better (N) and block doesn't move	A1
		(6)
4(b)	$(\uparrow) P\sin 30^o + S = 5g$	M1A1
	$(\rightarrow) P\cos 30^o = \frac{3}{7}S$ (Allow M1A0 if they use the max friction from (a) or $\frac{3}{7} \times$ wrong value for S) (allow M1A0 for $P\cos 30^o = F$)	M1A1
	Solve for P	DM1
	P = 19 or 19.4 (N)	A1
		(6)
		(12)
	Notes for question 4	
4(a)	M1 Correct no. of terms, condone sin/cos confusion and sign errors	
	A1 Correct equation **in *R* only**.	
	A1 Correct value (seen or implied)	
	M1 Use of $F = \frac{3}{7}R$ with their R substituted.	
	M1 Condone sin/cos confusion	
	A1 cao and any equivalent correct statement and justification	
4(b)	M1 Correct no. of terms, condone sin/cos confusion and sign errors	
	A1 Correct equation	
	M1 Correct no. of terms, condone sin/cos confusion and sign errors	
	A1 Correct equation	
	DM1 Dependent on both M marks; must be solving two equations in P and one other unknown	
	A1 cao	