Question Number	Scheme	Marks
2.	$T\cos 70^\circ + R = 40g$	M1 A1
	$T\cos 20^\circ = F$	M1 A1
	$F = \frac{3}{4}R$	B1
	Eliminate R and solve for T	**d**M1
	$T = 250$ (N) or 246 (N)	A1
		7
	Notes	
M1	Resolving vertically with usual rules i.e. correct no. of terms, condone sin/cos confusion, condone sign errors.	
A1	Correct equation.	
M1	Resolving horizontally with usual rules i.e. correct no. of terms, condone sin/cos confusion, condone sign errors.	
A1	Correct equation.	
B1	For $F = \frac{3}{4}R$ seen (could be on a diagram). **N.B.** R does not need to be substituted.	
dM1	Dependent on previous two M marks	
A1	246 (N) or 250 (N).	
	N.B. For a clear misread where they have the suitcase being dragged up an inclined plane, leading to: $R = 40g\cos 20^\circ$ $T - F - 40g\sin 20^\circ = 0$ $F = \frac{3}{4}R$ (leads to $T = 410.3$ (N) if done correctly) Can score MAX: M1A0M1A0B1dM0A0 (apply usual rules for M marks)	