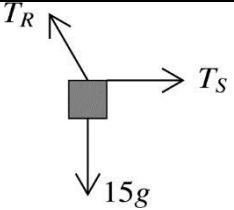


13	(a)		B1 [1]	1.1a	Three forces in approximately correct directions, with arrows and labels; tensions must be distinct Accept W or mg for the weight; condone missing g for this mark	
13	(b)	Resolve vertically: $T_R \cos 30^\circ = 15g$ $T_R = \frac{15 \times 9.8}{\cos 30^\circ} = 98\sqrt{3} = 170 \text{ N (3sf)}$	M1 A1 [2]	3.3 1.1b	Forming equilibrium equation (allow sin/cos interchange) Oe	
13	(c)	Resolve horizontally: $T_S = T_R \sin 30^\circ$ $T_S = 84.9 \text{ N (3sf)}$	M1 A1 [2]	1.1a 1.1b	Allow sin/cos interchange if consistent with (b) Oe	Accept $T_S = 15g \tan 30^\circ$