

Question	Answer	Marks	Guidance
(a)	$T_A \times 0.8 - T_B \times 0.6 - 20 = 0$ or $T_A \times 0.6 + T_B \times 0.8 - 10g = 0$	M1	Resolving horizontally or vertically
	$T_A \times 0.8 - T_B \times 0.6 - 20 = 0$	A1	
	$T_A \times 0.6 + T_B \times 0.8 - 10g = 0$	A1	
	$0.8T_A - \frac{0.6(10g - 0.6T_A)}{0.8} = 20 \rightarrow T_A = \dots$	M1	Attempt to solve simultaneously
	$T_A = 76 \text{ N}, T_B = 68 \text{ N}$	A1	
		5	

Question	Answer	Marks	Guidance
(b)	$T_A \times 0.6 - 10g = 0 \Rightarrow T_A = \frac{500}{3}$	B1	From using $T_B = 0$
	$T_A \times 0.8 - F = 0$	M1	
	$F = \frac{400}{3}$	A1	Allow $F = 133$ to 3 s.f.
		3	

