Question Number	Answer	Mark
	N.B. An extra g on 50 is an A error not an M error. Use of an incorrect angle consistently, should be marked as a Misread, but if used inconsistently M0.	
5.	$F + X\cos 40^\circ = 50\cos 70^\circ$	M1A1
	$R + X\sin 40^\circ = 50\sin 70^\circ$	M1A1
	Other possible equations: $(\rightarrow): X\cos 60^\circ + F\cos 20^\circ = R\sin 20^\circ$ $(\uparrow): X\sin 60^\circ + F\sin 20^\circ + R\cos 20^\circ = 50$	
	$F = 0.3R$	B1
	(X =) 5.2 or better (5.2435…)	A1 (6)
		(6)
	Notes	
5.	M1: Correct no. of terms, condone sign errors and sin/cos confusion Correct pairings of forces and angles.	
	A1: Correct 1st equation	
	M1: Correct no. of terms, condone sign errors and sin/cos confusion Correct pairings of forces and angles	
	A1: Correct 2nd equation	
	B1: Seen or implied – R does not need to be substituted	
	A1: 5.2 or better	
	N.B. Enter marks on ePEN, for the two equations, in the order in which they appear in the script. If they only write down a **SINGLE** equation which is a combination of their two equations: e.g. $0.3(\text{their } R) + X\cos 40^\circ = 50\cos 70^\circ$ Enter the marks for the bracketed 'equation' as the second M1A1	