

Question Number	Scheme	Marks
4(a)	$M(C), Mg \times 4.5 + 1.2g \times 2 = 4g \times 1.5$	M1A1
	$M = 0.8$ oe	A1 (3)
	Other possible equations: $(\uparrow), Y = 4g + 1.2g + Mg$ $M(A), 5Y = 1.2g \times 3 + 4g \times 6.5 + Mg \times 0.5$ $M(B), 1.5Y = 1.2g \times 3.5 + Mg \times 6$ $M(G), 2Y + Mg \times 2.5 = 4g \times 3.5$ from which Y would need to be eliminated.	
4(b)	$M(E), R_c \times 0.6 = 1.2g \times 2.6$	M1A1
	$R_c = 5.2g$ isw	A1 (3)
	Other possible equations: $(\uparrow), Xg + 1.2g = R_c$ $M(C), Xg \times 0.6 = 1.2g \times 2$ $M(A), 1.2g \times 3 + Xg \times 5.6 = R_c \times 5$ $M(B), 1.2g \times 3.5 + Xg \times 0.9 = R_c \times 1.5$ $M(G), Xg \times 2.6 = R_c \times 2$ from which Xg would need to be eliminated. (Note that $X = 4$) Xg may appear as a single letter.	
		(6)
	Notes	
4(a)	M1: For an equation in M only, with correct number of terms, condone sign errors and missing g 's A1: Correct equation A1: cao	
4(b)	M1: For an equation in R_c only, with correct number of terms, condone sign errors and missing g 's A1: Correct equation A1: $\frac{26g}{5}$, 51 or 51.0	