

**Oct 2018 IAL
WME01 (M1)
FINAL**

Question Number	Scheme	Marks
1(a)	$0.8 \times 4 - 2 \times 2 = 2v - 0.8 \times 2.5$ $v = 0.6 \text{ m s}^{-1}$	M1A1 A1 (3)
(b)	$I = 0.8(4 + 2.5) = 5.2, \text{ N s or kg m s}^{-1}$ OR: $I = 2(0.6 + 2) = 5.2, \text{ N s or kg m s}^{-1}$	M1A1,B1 (3) M1A1,B1 [6]
	Notes for qu 1	
1a	M1 for CLM, correct no. of terms, dim correct, condone extra g 's throughout and sign errors, in one unknown, with correct pairings of mass and velocity. N.B. Apply <u>same</u> criteria to an equation that has been found by eliminating the impulse from two imp-mom equations.	
	First A1 for a correct equation (condone extra g 's)	
	Second A1 for 0.6 (Must be positive)	
1b	M1 for Impulse – Momentum equation for either particle, correct no. of terms, with correct velocities, condone sign errors N.B. Mark the actual equation not the formula (some candidates use $I = m(v + u)$ when the direction has been reversed)	
	M0 if g included on momentum terms	
	A1 for 5.2 (Must be positive)	
	B1 for $\text{N s or kg m s}^{-1}$ N.B. M0A0B1 is possible	