11	(a)		Component in **i** direction zero $\Rightarrow k = -4$	**B1** **[1]**	3.3	Allow $(-4\mathbf{i} + 5\mathbf{j})$ seen instead of k	Do not allow for $k = -4\mathbf{i}$ or similar.
11	(b)		Weight $= -0.8g\mathbf{j}$	**B1**	1.2	Allow if seen	
			N2L $5\mathbf{j} + 3\mathbf{j} - 0.8g\mathbf{j} = 0.8\mathbf{a}$	**M1**	1.1a	Condone missing weight	
			$\left[\Rightarrow \mathbf{a} = 0.2\mathbf{j} \right]$ $\mathbf{v} = (4\mathbf{i} + 7\mathbf{j}) + 0.2\mathbf{j} \times 10$	**M1**	1.1a	Using their **a** in a vector *suvat* equation(s)	
			velocity is $(4\mathbf{i} + 9\mathbf{j})$ m s^{-1}	**A1** **[4]**	2.5	Must be in correct vector form	Accept fully correct column vector
			Alternative solution Acceleration is vertical so consider only vertical motion $5 + 3 - 0.8g = 0.8a$	**M1** **B1**		Applying N2L in 1-dimension Condone missing weight Including the weight (consistent sign convention)	
			$\left[\Rightarrow a = 0.2 \right]$				
			$v = u + at = 7 + 0.2 \times 10 = 9$	**M1**		Using *suvat* equation(s) in the vertical direction	Accept fully correct column vector
			So the velocity is $(4\mathbf{i} + 9\mathbf{j})$ m s^{-1}	**A1** **[4]**		Must be in vector form	