## Y1: Submitting Your Work For Marking

1. Identify the problem you have been asked to upload the solution for. For M&R, this is indicated with red text and a box around the question:

## Problem 3

Two particles move along an x axis. The position of particle 1 is given by  $x_1 = 6.00t^2 + 3.00t + 2.00$ ; the acceleration of particle 2 is given by  $a_2 = -8.00t$  and, at t = 0, its velocity is  $v_2 = 20ms^{-1}$ . When the velocities of the particles match, what is their velocity?

## For MM1, it is indicated with a key symbol.

- 3. Suppose that  $\mathbf{a} = \mathbf{i} + 2\mathbf{j}$ ,  $\mathbf{b} = \mathbf{j} + 3\mathbf{k}$  and  $\mathbf{c} = 2\mathbf{i} \mathbf{k}$ . Verify that
- (a)  $\mathbf{a} \cdot (\mathbf{b} \times \mathbf{c}) = \mathbf{b} \cdot (\mathbf{c} \times \mathbf{a}) = \mathbf{c} \cdot (\mathbf{a} \times \mathbf{b}),$
- (b)  $(\mathbf{a} \times \mathbf{b}) \times \mathbf{c} \neq \mathbf{a} \times (\mathbf{b} \times \mathbf{c})$ ,
- (c)  $\mathbf{a} \times (\mathbf{b} \times \mathbf{c}) = (\mathbf{a} \cdot \mathbf{c}) \mathbf{b} (\mathbf{a} \cdot \mathbf{b}) \mathbf{c}$ .
- 2. Take a photo of your full worked solution for this problem (only this one).

3. Upload the file to canvas before 12 noon on Friday. **Due** Friday by 12:00 Points 3 **Submitting** a file upload MandR-2021-W1-Kinematics.pdf ↓ The upload will Office 365 File upload automatically Upload a file, or choose a file you've already uploaded. be associated 1 Upload file with you – no need to put + Add another file your name or Click here to find a file you've already uploaded candidate Comments... number on it. Cancel Submit assignment

- 0 : Nothing uploaded
- 1 : Something uploaded, but nothing that makes sense. If they have uploaded a blank page for example, or if they have written the question but not attempted an answer. Or, if they uploaded just the answer, with no working.
- 2 : An attempt has been made to solve the question, but it is not complete. For example (for the first M&R question), they might have done the integral right but not solved the quadratic, or vice versa.
- 3. The correct answer is given.

4. Await your grade. You will be awarded a mark out of 3 (within the following week, but probably very quickly.