STAPLE

SAMPLE HOMEWORK FORMAT

Put name on each page!

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MA 1024A
Sec. A03A

Label problem with section number, problem number: no need to recopy text!

§1.3, #10

$\vec{a} = \hat{i} + \hat{j} = (1, 1, 0)$, $\vec{b} = 2\hat{i} + 3\hat{j} - \hat{k}$

$= (2, 3, -1)$

$\text{proj}_{\vec{a}} \vec{b} = \dfrac{\vec{a} \cdot \vec{b}}{\vec{a} \cdot \vec{a}} \vec{a}$, so

Put in enough detail to follow argument

$\vec{a} \cdot \vec{b} = (1, 1, 0) \cdot (2, 3, -1) = 2 + 3 + 0 = 5$

$\vec{a} \cdot \vec{a} = (1, 1, 0) \cdot (1, 1, 0) = 1 + 1 = 2$

$\therefore \boxed{\text{proj}_{\vec{a}} \vec{b} = \dfrac{5}{2}(1, 1, 0) = \dfrac{5}{2}\hat{i} + \dfrac{5}{2}\hat{j}}$

BOX FINAL ANSWER !!!

Put current page number/total number of pages at bottom of each page