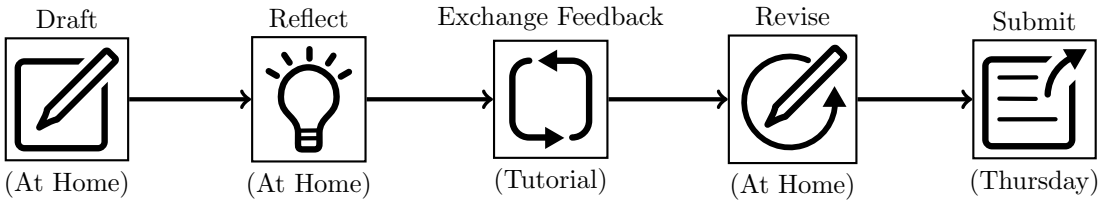
The PAR Process



Problem Statement

Let A be a nilpotent matrix and suppose $A^6 = 0$ but $A^5 \neq 0$. Further, suppose the vector spaces $\mathcal{V}_1, \ldots, \mathcal{V}_6$ satisfy

$$\ker(A^i) = \mathcal{V}_1 \oplus \mathcal{V}_2 \oplus \cdots \oplus \mathcal{V}_i.$$

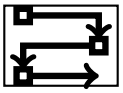
Is it possible that $\dim(\mathcal{V}_3) = 0$?

Reflection

Turn the page and check off the icons for things you think you did well; circle the icons for things you would like feedback on.

Feedback Provided By:_____

Suggestions Communication **Strengths**

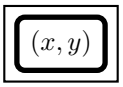


Show All Steps

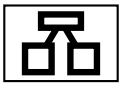
Explain Why,
Not Just What

Avoid Pronouns

Use Correct
Definitions

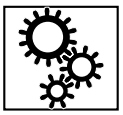


Define Variables,
Units, etc.

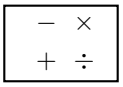


Create Diagrams

Suggestions Accuracy **Strengths**



Correct Setup



Accurate Calculations

Solve Multiple Ways

Answer Reasonable

Other
(Write Below)