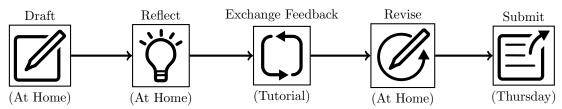
## The PAR Process



## **Problem Statement**

Suppose  $\vec{v}_1, \vec{v}_2, \vec{v}_3, \vec{v}_4 \in \mathbb{R}^3$ . Let  $\mathcal{V} = \{\vec{v}_1, \vec{v}_2, \vec{v}_3, \vec{v}_4\}$  and let  $X = [\vec{v}_1 | \vec{v}_2 | \vec{v}_3 | \vec{v}_4]$  be the matrix whose columns are  $\vec{v}_1, \vec{v}_2, \vec{v}_3, \vec{v}_4$ . Suppose further that every subset  $\mathcal{Y} \subset \mathcal{V}$  of *size two* is linearly independent. Explain what form(s) rref(X), the reduced row echelon form of X, must take in this case.

Hint: you won't be able to pin down exact numbers for every entry of rref(X), but you might know things like whether the entry can be zero or not, etc.

Feedback Provided By:\_



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)