

Problem Statement

We have encountered two definitions of *linear independence*: one that references spans and removing a vector, and one that talks about non-trivial linear combinations. Call the former, the span definition of linear independence, *definition A* and the latter, the non-trivial linear combination definition of linear independence, *definition B*.

1. Show that definition A and definition B are equivalent. (To show this, you should show that definition A implies definition B and that definition B implies definition A. Clearly indicate what you intend to show before you show it.)
2. Consider the set $X = \{\vec{0}\}$. Is X a linearly independent or a linearly dependent set? Do both definitions apply to X ? Do you need to make any assumptions to apply both definitions of linear independence to X ?

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.

Suggestions

Communication

Strengths



Show All Steps



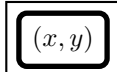
Explain Why,
Not Just What



Avoid Pronouns



Use Correct
Definitions



Define Variables,
Units, etc.

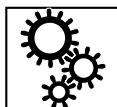


Create Diagrams

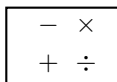
Suggestions

Accuracy

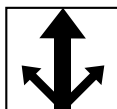
Strengths



Correct Setup



Accurate Calculations



Solve Multiple Ways



Answer Reasonable



Other
(Write Below)