
1 Big Ideas about Vectors

Learning Outcomes

After completing this chapter, students should be able to do the following.

- Express vectors as linear combinations of other vectors in $\mathbb{R}^n$ in both algebraic and geometric settings.
- Interpret a system of linear equations as an expression of one vector as a linear combination of other vectors in $\mathbb{R}^n$.
- Describe the span of a set of vectors in $\mathbb{R}^n$.
- Determine linear independence / dependence of a set of vectors in $\mathbb{R}^n$.