



Vector Magnitude and Direction

Today's Standard

HSN.VM.A1 - (+) Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes (e.g., \mathbf{v} , $|\mathbf{v}|$, $\|\mathbf{v}\|$, v).

Cues	Notes
What is a vector?	Vectors have both magnitude and direction.
How do vectors differ from scalars?	Scalars only have magnitude, no direction. Magnitude is the size or quantity of the vector.
What is magnitude?	Vectors are represented by directed line segments, symbols like \mathbf{v} , $ \mathbf{v} $, $\ \mathbf{v}\ $.
How are vectors represented?	
Why are vectors important?	Vectors are crucial in fields like physics, engineering, and computer graphics.

Summary

Vectors are quantities with both magnitude and direction, represented by directed line segments and specific symbols. Understanding vectors is essential for solving real-world problems in various STEM fields.