

# Vectors

---

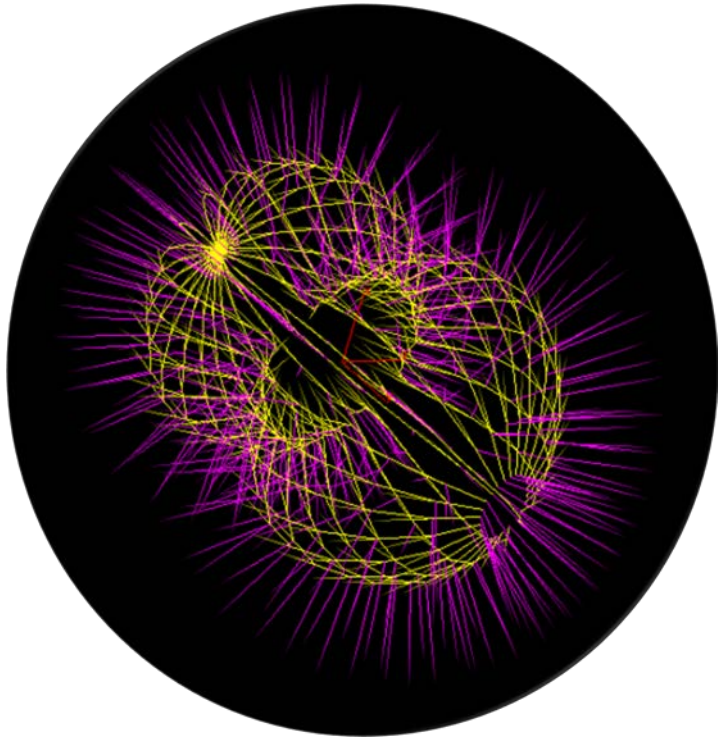


**Beau Garcia**

SENIOR EFFECTS TECHNICAL DIRECTOR

[www.beaufx.com](http://www.beaufx.com)





## Vectors

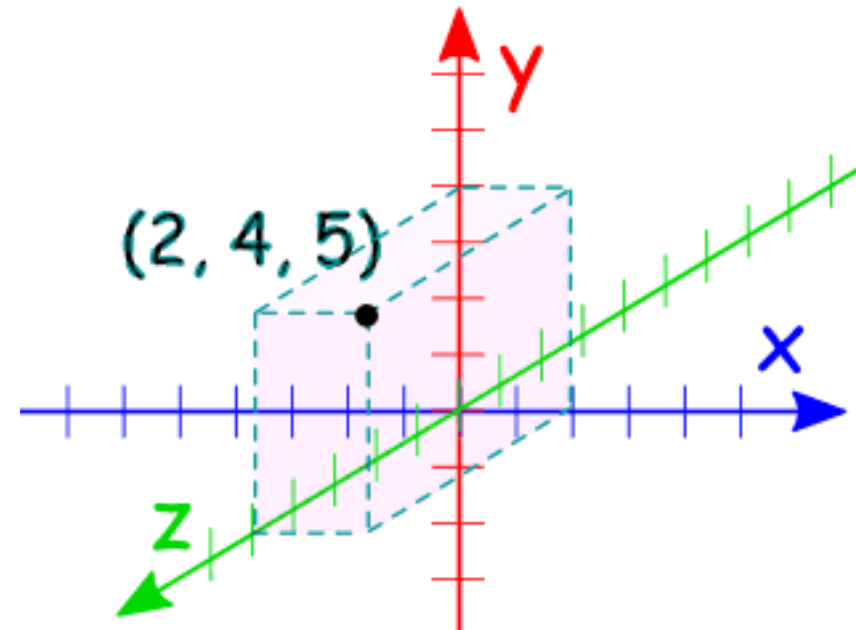
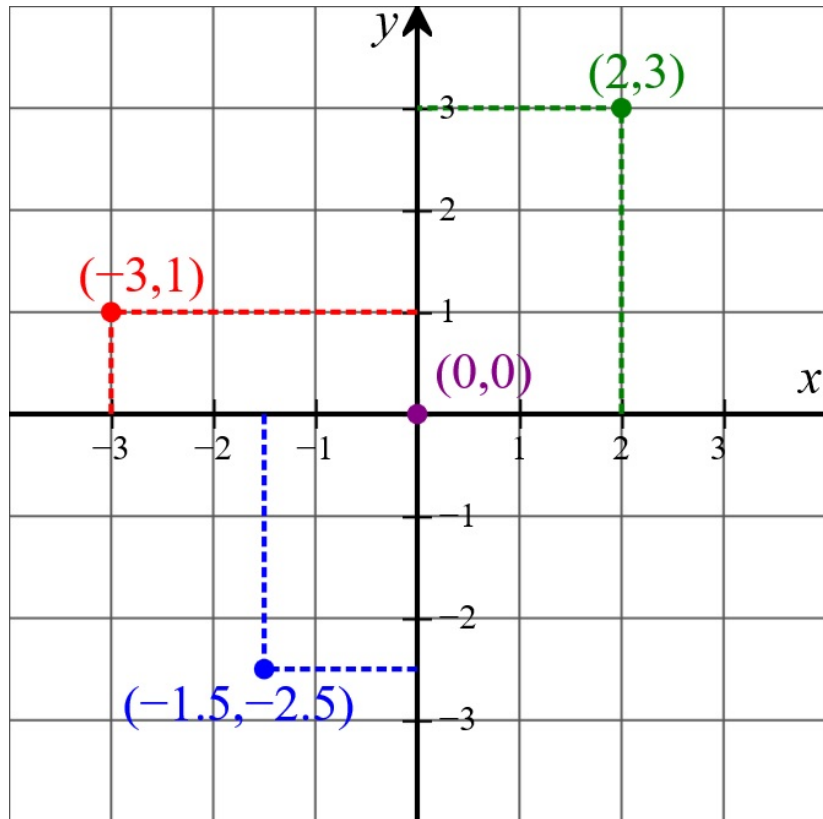
- Cartesian Coordinate System
- Creating & manipulating Vectors
- Visualising vectors
- Houdini Vector Types
- Example Scenes

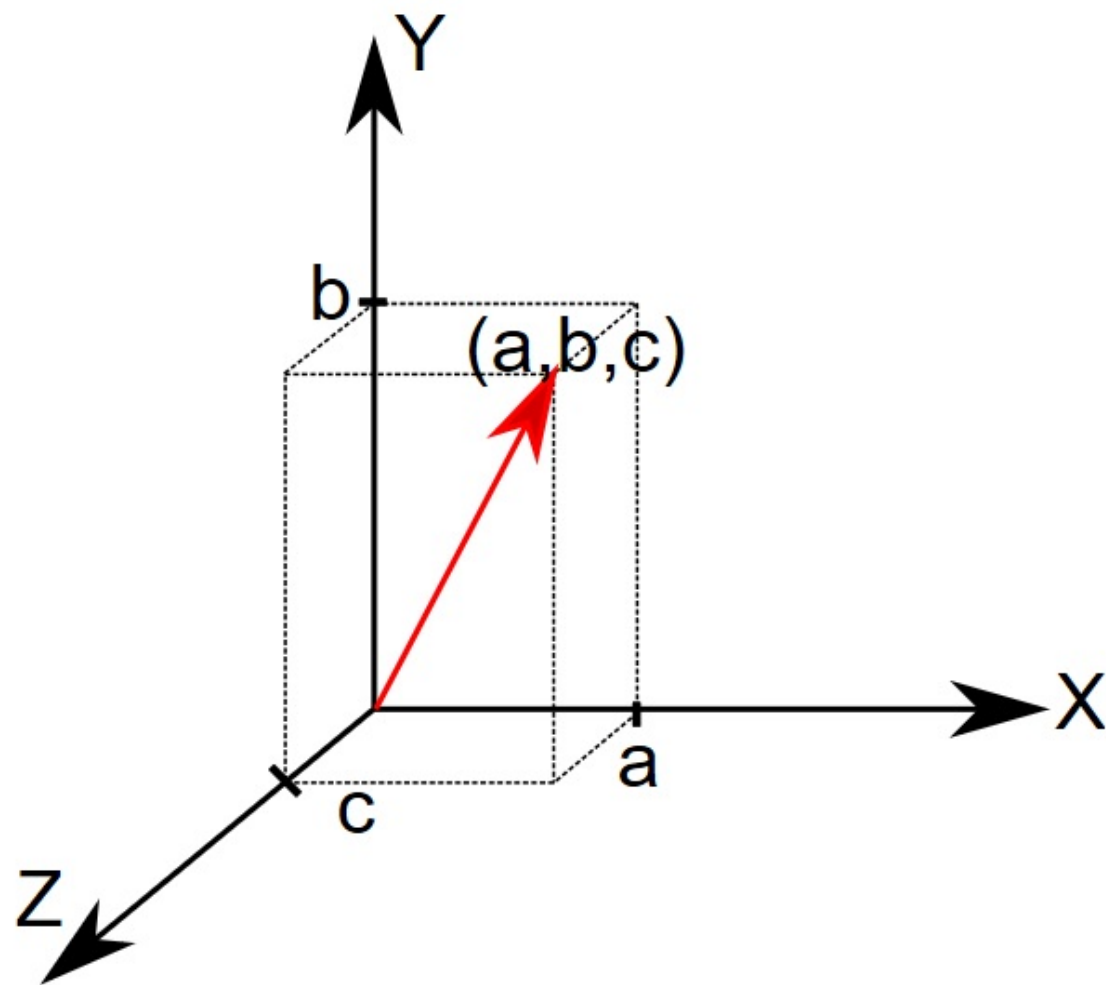
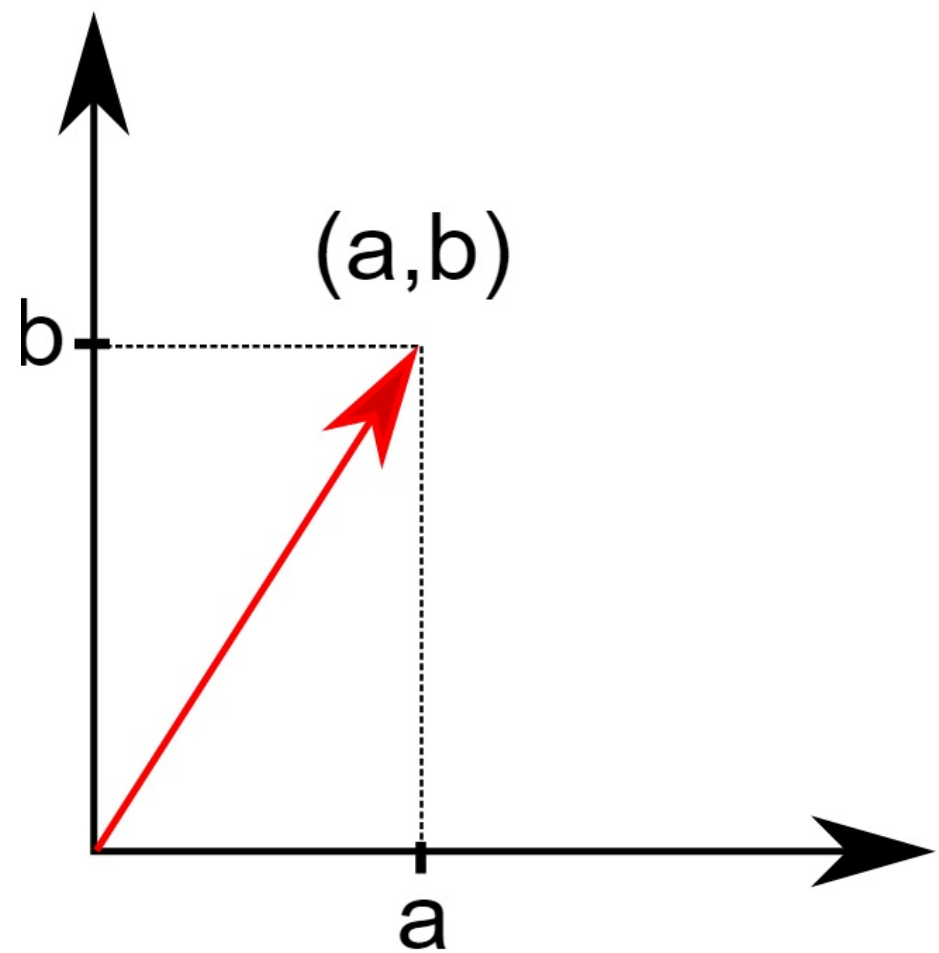


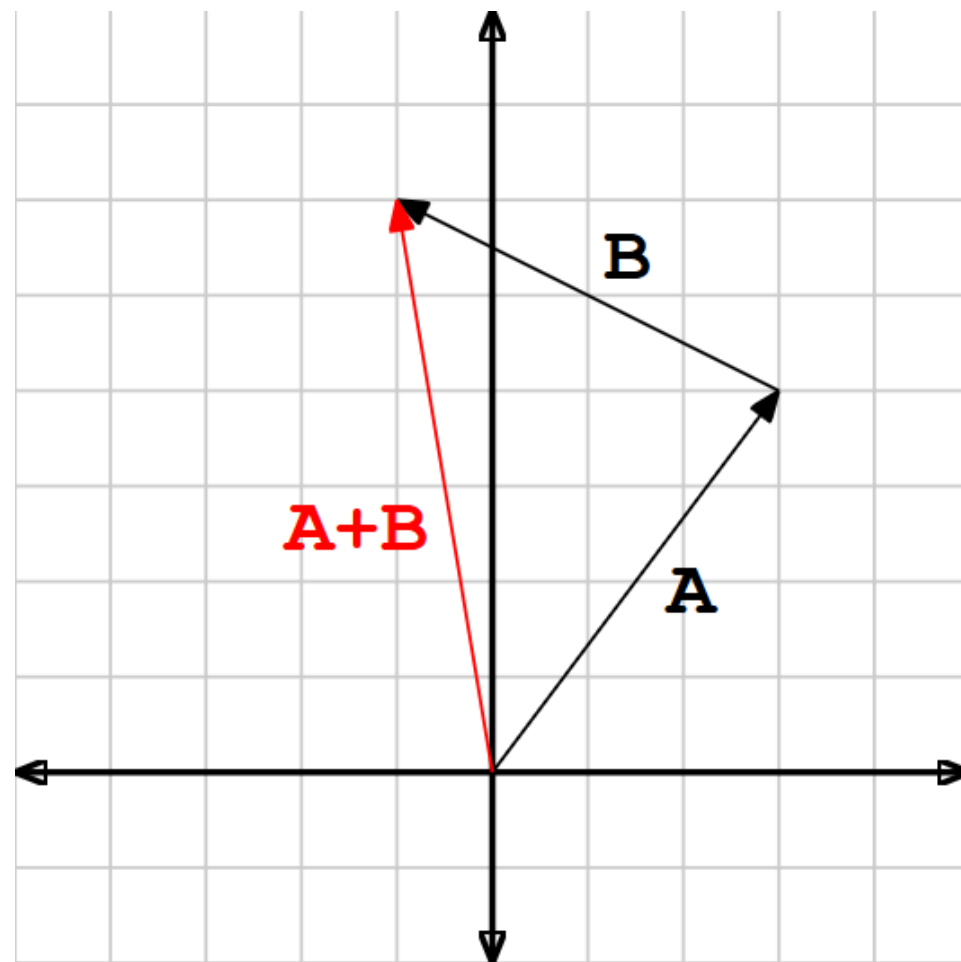
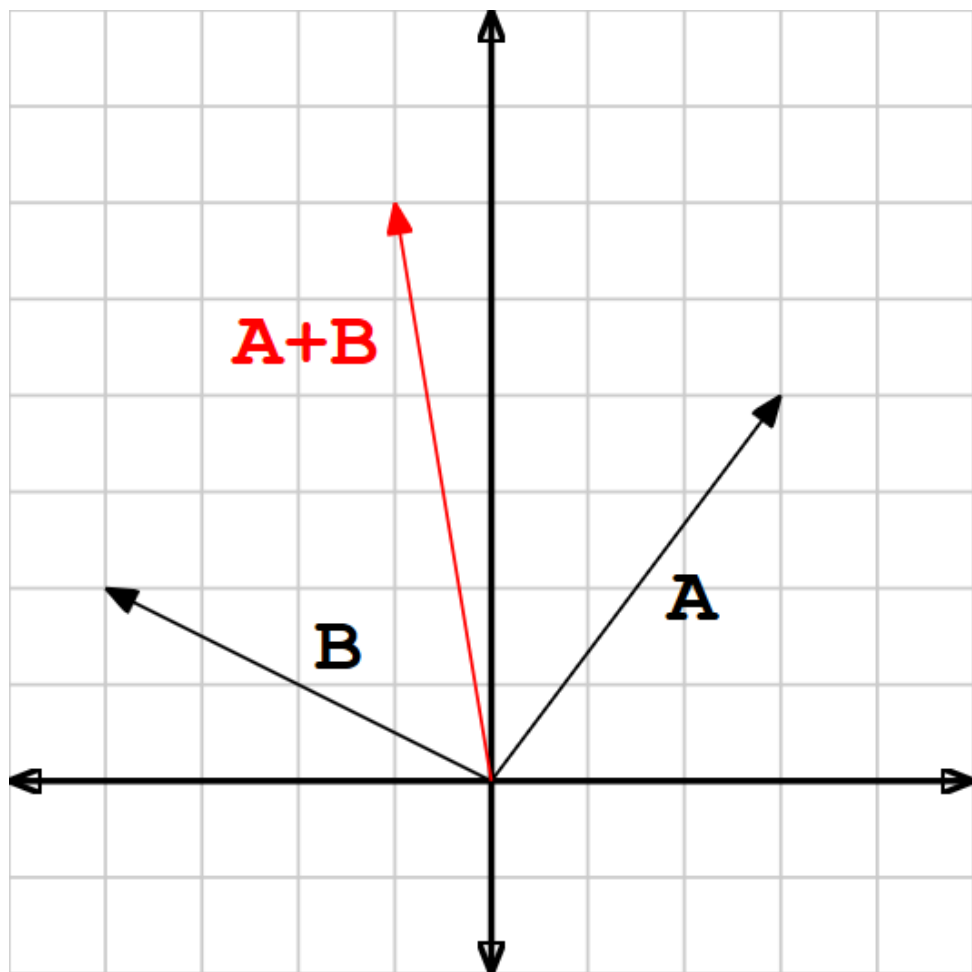
## Vectors

- Scalar (Magnitude) = (4,1,5)
- Vector (Direction & Magnitude) = (10,12,5)
- Vector Data Type ( Number List ) = (X,Y,Z)

## Cartesian Coordinate System







# Summary



- **Vectors, Scalars & Vector Data Types**
- **Magnitude + Direction**
- **Basic Operations**
- **Visualization**

