Chapter 11: Introduction to Vectors

Upon successful completion of Chapter 11, the student should be able to:

Give "physical" examples to illustrate the distinction between vector and scalar quantities.

Represent vectors in two/three dimensions as ordered pairs/triples, as arrows, and by specifying magnitude and direction.

Perform vector addition and scalar multiplication both geometrically and symbolically. Apply these operations to motion problems.

Calculate the dot product of vectors, and apply it in geometric and "physical" contexts (angles, projection, work, etc.).