**Dot Product of and**

Ex: Find each dot product

**Properties of Dot Products**

\* \* magnitude of

Ex: Use to find each of the following:

**Using dot product to find the magnitude of a vector**

so

Ex: find the magnitude of

=

=

=

**The angle between two vectors**

Ex: find the angle between the vectors:

**Orthogonal Vectors (perpendicular)**

**Definition of orthogonal vectors**

Vectors andare orthogonal iff

Ex: Are the vectors and  orthogonal?

Ex: Determine whether the vectors:

are orthogonal?

parallel?

neither?