

Dot Product

Reading

Section 13.3

Problems

- Practice Problems: 13.3 5, 9, 11, 15, 17, 25, 29, 31, 35, 37, 81, 82, 87, 88
- Problems to turn in: 13.3 10, 18, 30, 38, 50

Topics to know

1. Definition of dot product
2. Basic properties of dot product: commutativity, pulling out scalars, distributive
3. Alternative form of dot product via cosine (theorem 2)
4. Proof of alternative form
5. Perpendicular vectors, orthogonality (example 3)
6. Determining obtuse angles (example 4)
7. Projections (theorem 3)