

Chapter 3 Study Guide

Prior to lecture:

1. Read Ch. 3 in the textbook
2. Define the following terms:
 - a. Resultant
 - b. Head-to-tail method
 - c. Magnitude
 - d. Range
 - e. Projectile
 - f. Trajectory
 - g. Tail
 - h. Air resistance
3. Using a ruler, protractor, and graph paper, work through examples 3.1 and 3.2.
4. Answer conceptual questions 1, 2, and 3 on page 118 of the text.
5. Answer the following questions:
 - a. What is the Pythagorean Theorem? How is it used in this chapter?
 - b. What is a right triangle? Sketch a picture of one and label the two sides as A and B and the hypotenuse as C . Label the right angle in your picture. Label one of the other two angles as θ .
 - c. What are sine, cosine, and tangent of your right triangle from part b for angle θ ? How are these three functions useful in this chapter?
6. Answer conceptual questions 7 and 12 on page 119 of the text.

After lecture:

1. Review notes from lecture
2. Redo all example problems from lecture
3. Reread text
4. Work through example problem 3.3 in the text.
5. Answer conceptual questions 5, 9, and 11 on pages 119 of the text.
6. Work through example problems 3.5, 3.6, and 3.7 in the text.
7. Answer conceptual questions 13, 14, 16, and 20 on pages 119-120 of the text.
8. Redo all recitation worksheet problems
9. Complete homework for chapter 3
10. For extra practice, try the following problems from chapter 3 of the textbook: 1, 2, 10, 11, 12, 13, 14, 18, 21, 26, 32, 38, 39, 42, 45, 58, 63, 67