

Chapter 13 Outline

Geometry—Similar Triangles and Trigonometry

Write a page of notes for each section in the chapter. These will be collected for a grad at the end of the chapter. Notes are graded on organization, completeness, and accuracy.

Each section should have these headings:

1. **Title** and **section** number
2. **Goals:** Look at the examples, find the verbs, and describe what we should be able to do after this section.
3. **Tools:** Write any important definitions, theorems, or techniques.
4. **Procedure:** Show the steps in an example problem. Explain the procedure to yourself.
5. **Errors:** After you have done and checked the homework, analyze the kind of mistakes you make. Write yourself notes and reminders about how to avoid these mistakes.

| Unit | Date | Objectives | Assessment |
|------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 1 | | The SSS Similarity Theorem Determine whether or not triangles are similar | |
| 2 | | The AA and SAS Similarity Theorems Use the AA And SAS theorems to decide if triangles are similar Find lengths and distances in triangle pairs | |
| 3 | | The Side Splitting theorem Use the side splitting theorem and its converse to determine lengths. | |
| 4 | | Geometric Means in Right Triangles Calculate lengths using the right triangle altitude | Quiz 1-3 20pts |
| 5 | | Special Right Triangles Calculate lengths in 45-45-90 and 30-60-90 triangles. | |
| 6 | | The Tangent of an angle Determine the tangents of angles using lengths and definitions. Estimate the tangent using tables or calculators. Determine the exact tangent for 30, 60 and 45 degree angles. Use tangents to determine lengths. | |
| 7 | | The Sine and Cosine Ratios Determine sines and cosines from lengths and definitions. Estimate sines and cosines from tables and calculators. Determine exact sines and cosines for 30, 60 and 45 degrees. Use sines and cosines to calculate lengths. | Quiz 4-7 20pts |
| 8 | | More Work with Vectors and Areas Determine components of a vector. Find a vector from its components. Find a triangle area with Hero's formula (SAS) | |
| 9 | | Chapter Review and Notes | Chapter Test 100pts |