PreCalculus

Chapter 6: Triangle Trigonometry

1. **Section 6-1**: Introduction to Oblique Triangles

**Learner Outcome**: Given two sides and the included angle of a triangle, find by direct measure the third side of the triangle.

**Read**: P.223-225

**Assignment**: P.225 #1-6

1. **Section 6-2**: Oblique Triangles: Law of Cosines

**Learner Outcome:** Given two sides and in the included angle of a triangle, derive and use the law of cosines for finding the third side. Given three sides of a triangle, find an angle.

**Read**: P.226-229

**Assignment**: P.229 Q1-Q10, 1, 3, 6, 7, 11, 15 **#7**

1. **Section 6-3**: Area of a Triangle

**Learner Outcome**: Given the measure of two sides and the included angle, find the area of the triangle.

**Read**: P.231-233

**Assignment**: P.233 Q1-Q10, 1-13odd **#9**

1. **Section 6-4**: Oblique Triangles: Law of Sines

**Learner Outcome**: Given the measure of an angle, the length of the side opposite this angle, and one other piece of information about the triangle, find the other sides and angle measures.

**Read**: P.234-237

**Assignment:** P.237 Q1-Q10, 1-13odd **#5 or #11**

1. **Quiz 6.1 – 6.4**
2. **Section 6-5**: The Ambiguous Case

**Learner Outcome**: Given two sides of a triangle and non-included angle, calculate the possible values of the third side.

**Read**: P.239-240

**Assignment**: P.241 Q10-Q10, 1-13odd **#5 or #9**

1. **Section 6-6:** Vector Addition

**Learner Outcome**: Given two vectors, add them to find the resultant vector.

**Read**: P.242-247

**Assignment:** P.247 Q1-Q10, 2, 4, 6 **#2 or #4**

1. **Section 6-6 continued:** Vector Addition

**Assignment**: P.248 #5-17odd **#9 or #13**

1. **Section 6-7**: Real World Triangle Problems

**Learner Outcome**: Given a real-world problem, identify a triangle, and use the appropriate technique to calculate unknown side lengths and angle measures.

**Read**: P.250-251

**Assignment**: P.251 Q1-Q10, 1-9odd **#5**

1. **Section 6-7 Continued**: Real World Triangle Problems

**Assignment**: P.253 #11-17odd + one of your own **#17**

1. **Chapter 6 Review**

**Assignment**: P.260 T1-T20

1. **Chapter 6 Test**