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| **OBJECTIVES \_\_Chapter 4: Section 4.2, Trigonometric Functions of Acute Angles (Pages 322 – 327).** |
| * Distinguish between an oblique and a right triangle.
 |
| * Use the Pythagorean Triangle to find the 3rd side of a right triangle when given the other 2 sides.
 |
| * Be able to express a radical answer in simplest radical form.
 |
| * Find the six trigonometric functions by using the sides of a right triangle.
 |
| * Be able to find an acute angle in a right triangle by using the inverse trig function of the ratio of the corresponding 2 sides.
 |
| * Find the six trig functions of the special angles 30, 45, and 90 degrees. Give exact values.
 |
| * Apply right triangle trigonometry to actual situations.
 |
| * Distinguish between angles of depression and elevation.
 |

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| **NEW OBJECTIVES \_\_\_Chapter 5: Section 5.6, The Law of Cosines (Pages 435 – 440).** |
| * **Know that an oblique triangle** is a triangle that does **not** contain a right angle.
 |
| * Understand **The Triangle Inequality Theorem:** The sum of the lengths of any two sides of a triangle must be greater than the third side.
 |
| * Use the **Law of Cosines** to solve a right triangle **or** an oblique triangle when given SAS or SSS.
 |
| cosine law ... |
| * Be able to find the areas of both right and oblique triangles.
 |
| * Use Area = 0.5(base)(height) for right triangles and oblique triangles when you know the base and the height.
 |
| * Use The Law of Sines Area Formula for oblique triangles when you know 2 sides and an included angle (SAS).
 |
| * Use Hero’s (Heron’s) Formula when you know all 3 sides (SSS).
 |

**TUESDAY (3.25.25)**

* **Homework Check of these previously assigned problems:**

**P**age 394 (#95 – 98, 101, 102).

* **Class Work: The Law of** **Cosines, Areas of Oblique Triangles**
1. **SAS are given**: How long is side c, rounded to the nearest hundredth? Use The Law of Cosines.



1. **SSS are given:** What is Angle C, rounded to the nearest tenth? Use The Law of Cosines.



1. **SSS are given:** Find the Area of a Triangle with these 3 side lengths.

**a = 5;** b = 6; c = 9. Use Hero’s (Heron’s) Law. Round to the nearest tenth.

1. **SAS are given:** Find the Area of a Triangle with A = 50o, b = 12, c = 8.

**Class Work/Homework:** Pages 440 and 441, ***Exercises***, #1, 3, 5, 7, 17, 21. Round to the nearest tenth.

**THURSDAY (3.27.25)**

**Class Work/Homework:** Pages 440 and 441, ***Exercises***, #2, 4, 6, 8, 10, 18, 22, 23. Show all work. Round to the nearest tenth.

**FRIDAY (3.28.25) NO CLASS, SENIOR PROJECT PRESENTATIONS**