

CHAPTER 5 REVIEW

Today's Learning Goal(s):

By the end of the class, I will be able to master the concepts presented in this unit.

The learning goals for this unit were:

- 5.0 Identify the opposite, adjacent and hypotenuse side of a right triangle relative to a given angle.
- 5.1 Use primary trig ratios to solve real-life problems.
- 5.2 Solve real-life problems by using combinations of primary trig ratios.
- 5.3 Use the sine law to solve real-life problems.
- 5.4 Use the cosine law to solve real-life problems.
- 5.5 Solve problems involving the primary trig ratios and the sine and cosine laws.

CHAPTER 5 REVIEW

For right triangles:

Use the primary trig **RATIOS!**

This means SOH CAH TOA

Although both the Sine Law and the Cosine Law apply to all triangles, we generally only use them with non-right triangles.

This is because when given a right triangle, SOH CAH TOA is faster.

(There is also a case where the LAWS won't work.)

Use the Sine Law if you are given:

-any 2 angles and 1 side

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

Use the Cosine Law if you are given:

-2 sides and the contained angle (SAS)

$$a^2 = b^2 + c^2 - 2bc \cos A$$

-2 sides, and the angle opposite one of the given sides

$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

-all 3 sides (SSS) and no angles

$$\cos A = \frac{b^2 + c^2 - a^2}{2bc}$$

Memorize all formulas needed.

Review Quiz questions, correct solutions, and PROPER FORM.

Practice with **YOUR** calculator.

Understand how to round properly:

[lengths to 2 decimal places, and angles to 1 decimal place.]

Application questions

Sketch a diagram

(if it's a right triangle, label the sides: hypotenuse, opposite, adjacent)

Understand the reference point, i.e. the surveyor's eye level

Know the difference between the angle of elevation

and angle of depression and how to label it properly.

Today's Assigned Practice: p. 314 # 1 – 10 AND p. 316 # 1 – 8