

Math 240 Rubric**SLO: Students will be able to think analytically and read critically to solve trigonometric problems.**

Description	2	1	0
Draw a properly labeled diagram to illustrate the given information.	Diagram is correctly labeled with all the given information.	Diagram has missing some of the given information but what is labeled is correct.	There are mistakes in the labeled information.
Correct setup using an appropriate trigonometric equation(s).	The set up equation(s) is (are) correct and corresponding values are correctly substituted.	The set up equation(s) is (are) correct but the corresponding values are incorrectly substituted.	The set up equation(s) is (are) wrong.
Use appropriate math techniques to solve the equation(s).	Solves equation(s) correctly.	Partially solves an equation(s).	Uses incorrect technique or guesses.
Determine a correct and meaningful solution.	Gives correct answer(s) to the equation.	Gives a partial answer to the equation(s).	No answer or wrong answer based on the equation(s).

Suggested Sample Problem:

Given $\triangle ABC$ with $a = \text{length of } \overline{BC}$, $b = \text{length of } \overline{CA}$, $c = \text{length of } \overline{AB}$, $\alpha = m\angle CAB$, $\beta = m\angle ABC$, $\gamma = m\angle BCA$. Also given $(\alpha, a, b) = (30^\circ, 1, \sqrt{2})$. Find the solution(s) for β by doing the following steps:

- Draw a properly labeled diagram to illustrate the given information.
- Set up an equation to solve for β .
- Use appropriate math techniques to solve the equation.
- Find the solution(s) for β .