| | Mathematics Practices | Partial | Moderate | Strong |
|------------------------------|---|--|---|---|
| GOAL: | Given a problem to solve, the student will explain and justify their reasoning. | | | |
| Make sense of problems | | Explain their thought processes in solving a problem one way. | | Discuss, explain, and demonstrate solving a problem with multiple representations and in multiple ways. |
| | DATE COMMENT | | | |
| | | Identify the variables and what the problem is asking. | Analyze information (givens, constrains, relationships, goals) | Monitor and evaluate the progress and change course as necessary |
| | DATE COMMENT | | | |
| | | Choose a solution path. | | Check answers to problems and ask, "Does this make sense?" |
| | | | predict whether solution will be bigger or smaller and justify your prediction | |
| | DATE | | numerically estimate the answer and justify your estimation | |
| | DATE COMMENT | | | |
| | | Explain their thinking | | Students explain and justify their progress and critic the progress of others. |
| | DATE COMMENT | | | |
| | | Students try special cases or simpler forms to gain insight. (They hypothesize and test conjectures) | | Students model multiple approaches TO make sense of their solution. |
| | DATE COMMENT | | | |
| | | Students explain correspondence between equations, | Represent the same data as equations, tables, graphs, | Students select the most appropriate display of the |