

## Problem Solving Journal Scoring Guide

Review the criteria below relative to your work on the current set of journal problems. Place a check mark in front of each of the criteria that is reflected in your work on these problems.

**Exceptional.** Work reflects all the criteria of Quality Work and for each problem goes above and beyond in two or more of the following ways.

- Provides multiple approaches for solving the problems.
- Describes conjectures and/or makes generalizations.
- Offers observations about the mathematical relationships.
- Poses and investigates “what-if” questions and “I wonder” statements.
- Gives examples and/or counterexamples to illustrate ideas.
- Justifies *why* concepts and strategies are effective and reasonable.

**Quality.** Work shows solid understanding of the problems’ mathematical ideas.

- Uses an appropriate and systematic strategy for solving the problem.
- Represents solution process with diagrams/sketches, words, and/or numbers and math symbols.
- Communicates mathematical reasoning coherently and precisely.

**In Development.** Work shows nearly complete understanding of the problems’ mathematical ideas.

- Uses a strategy that is only partially useful or partially complete.
- Gives clear evidence of the solution process and the process is complete or nearly complete and systematic.
- Provides reasonably clear explanations and/or descriptions.

**Restart/ Rethink.** Work shows misunderstanding or no understanding of the problems.

- Uses inappropriate or incomplete strategies.
- Provides sketchy, ineffective, or no explanation.