# **Student Problem Solving Tips**

## You may use manipulatives or a calculator to work on your problem.

To receive the highest score in each of the five areas, you will want to be certain your work <u>SHOWS</u> each of these parts of a successful solution.

#### 1. Making Sense of the Task

- □ I turned important information into numbers, symbols and/or diagrams.
- □ The mathematics I used fits the problem.
- □ If possible, I showed connections and/or extended my work to other math ideas.

### 2. Representing and Solving the Task

- □ I used strategies that fit the problem.
- □ I showed all my work (diagrams, pictures, models, numbers, symbols and/or words).
- □ If possible, I was able to make generalizations and/or compare my work to other ways the task could have been completed.

#### 3. Communicating Reasoning

- □ The path leading through my complete solution has no gaps for the reader to fill in.
- □ I used mathematical language/labels appropriately.
- □ My answer is clearly identified.
- □ If possible, I used graphics and/or examples to enhance my work.

#### 4. Accuracy

- □ My final answer is complete and justified.
- □ The work shown on my paper leads to my answer.
- □ If possible, I extended my solution by asking new questions leading to new problems. .

#### 5. Reflecting and Evaluating

- □ My solution matches what the problem was asking.
- □ I reviewed ALL of my work (interpretation of the problem, concepts, strategies, and calculations) to show that my answer makes sense and it is correct.
- □ If possible, I worked the entire problem a second way.

# **RECAP:**

<u>Show</u> your answer and all of your work so everything is clear to the reader