# Mathematics Problem Solving Scoring Guide: Plain Language Student Version

*(Unofficial: to be used as a support for students as they learn to use the official scoring guide)*

| Process Dimensions | **6/5 | 4 | 3 | *2/1 |
|---|---|---|---|---|
| **Making Sense of the Task**<br>*Understand the ideas and change them into mathematics*<br>**WHAT?** | • The problem is changed into thoroughly developed ideas that work.<br>• The ideas are connected to other math ideas. | • The problem is changed into a math task with ideas that can work. | • Parts of the problem are changed into a math with ideas that can work.<br>**OR**<br>• Only parts of the problem are understood. | • Only a small portion of the problem is understood.<br>**OR**<br>• No understanding is shown. |
| **Representing and Solving the Task**<br>*Choose the plan that works best for this problem. Use pictures, charts, words, graphs and/or numbers.*<br>**HOW?** | • A thoroughly developed plan is used.<br>• The plan uses advanced math.<br>• The plan is connected to other math ideas. | • The plan is complete and works. | • The plan could solve some parts of the problem.<br>**OR**<br>• The plan has a few missing parts.<br>**High School Essential Skills ONLY:**<br>• The plan does not use High School level math. | • The plan has many missing parts.<br>**OR**<br>• The plan cannot work.<br>**OR**<br>• No work is shown. |
| **Communicating Reasoning**<br>*Use the language of math (words, equations, graphs, charts) to make your ideas clear to others.*<br>**WHY?** | • The path through the work is very clear.<br>• An explanation connecting each of the parts is given using precise mathematical language.<br>• All parts are labeled and identified. | • The path through the work is clear.<br>**AND**<br>• The work leads to a clearly identified answer.<br>• Math words and symbols are used. | • The path is not clear or the math words and symbols do not make sense.<br>**OR**<br>• The path leaves out important parts of the work.<br>**OR**<br>• The answer is not identified. | • The path to complete the work is just started.<br>**OR**<br>• The parts do not connect to each other.<br>**OR**<br>• No steps are shown. |
| **Accuracy**<br>*The answer is…*<br>**IS IT RIGHT?** | • The answer is correct.<br>• The outcome extends beyond the question asked.<br>**OR**<br>• The outcome connects to a related math idea or question. | • The answer given is correct.<br>• The answer matches the work.<br>• The solution answers the question asked. | • The correct answer is given but the work may have a small error.<br>• The answer is wrong due to a small error.<br>**OR**<br>• The work leading to an answer is correct but is not finished. | • The answer given is not correct.<br>**OR**<br>• The answer given does not match the work.<br>**OR**<br>• No answer is given. |
| **Reflecting and Evaluating**<br>*State and check your answer, and explain why it makes sense*.<br>**CHECK?** | • The problem is solved a second time using a different method.<br>• Different methods used are compared to each other.<br>• Evidence is provided that explores other possible answers and interpretations. | • The answer is written in a complete sentence and answers the question that was asked.<br>**AND**<br>• All of the work has been double-checked to show why the answer makes sense. | • The answer is not written in a complete sentence or does not answer the question that was asked.<br>**OR**<br>• Some, but not all of the work is checked. | • The check does not work.<br>**OR**<br>• The check is barely started.<br>**OR**<br>• The check is not there at all. |

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****6 for a given dimension would have most of the list; 5 would have some of the list.**
***2 for a given dimension would be inadequate in some of the list; while a 1 would be inadequate in most of the list.**