

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

**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.