

# 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)*

<b>Process Dimensions</b>	<b>**6/5</b>	<b>4</b>	<b>3</b>	<b>2/1*</b>
<p><b>Making Sense of the Task</b> <i>Understand the ideas and change them into a math task</i></p> <p><b>WHAT?</b></p>	<ul style="list-style-type: none"> <li>The problem is changed into thoroughly developed ideas that work.</li> <li>The ideas are connected to other math ideas.</li> </ul>	<ul style="list-style-type: none"> <li>The problem is changed into a math task with ideas that can work.</li> </ul>	<ul style="list-style-type: none"> <li>Parts of the problem are changed into a math task with ideas that can work.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>Only parts of the problem are understood.</li> </ul>	<ul style="list-style-type: none"> <li>Only a small portion of the problem is understood.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>No understanding is shown.</li> </ul>
<p><b>Representing and Solving the Task</b> <i>Choose the strategy that works best for this problem.</i></p> <p><b>HOW?</b></p>	<ul style="list-style-type: none"> <li>A thoroughly developed plan is used that contains pictures, charts, words, graphs and/or numbers.</li> <li>A thoroughly developed plan may contain more than one step.</li> </ul>	<ul style="list-style-type: none"> <li>A plan using pictures, charts, words, graphs and/or numbers is used to solve the problem.</li> </ul>	<ul style="list-style-type: none"> <li>The plan could solve some parts of the problem.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>The plan has a few missing parts.</li> </ul>	<ul style="list-style-type: none"> <li>The plan has many missing parts.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>The plan cannot work.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>No work is shown.</li> </ul>
<p><b>Communicating Reasoning</b> <i>Use the language of math (words, equations, graphs, charts) to make your ideas clear to others.</i></p> <p><b>WHY?</b></p>	<ul style="list-style-type: none"> <li>The steps to complete the work are very clear.</li> <li>An explanation connecting each part is given.</li> </ul>	<ul style="list-style-type: none"> <li>The path through the work can be followed to a clearly identified solution.</li> </ul> <p><b>AND</b></p> <ul style="list-style-type: none"> <li>Some attempt is made to explain why one step followed another.</li> </ul>	<ul style="list-style-type: none"> <li>The path is not clear.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>The path leaves out important parts of the work.</li> </ul>	<ul style="list-style-type: none"> <li>The steps to complete the work are just started.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>No steps are shown.</li> </ul>
<p><b>Accuracy</b> <i>The answer is...</i></p> <p><b>IS IT RIGHT?</b></p>	<ul style="list-style-type: none"> <li>The solution is correct and may be extended.</li> <li>The solution is correct and the problem is solved another way.</li> </ul>	<ul style="list-style-type: none"> <li>The answer given is correct and matches the work shown.</li> </ul>	<ul style="list-style-type: none"> <li>The answer given may have a small error.</li> <li>Otherwise the main parts of the work are good.</li> </ul>	<ul style="list-style-type: none"> <li>The answer given is not correct or not finished.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>The answer given doesn't match the work.</li> </ul>
<p><b>Reflecting and Evaluating</b> <i>State and check your answer, and explain why it makes sense.</i></p> <p><b>CHECK?</b></p>	<ul style="list-style-type: none"> <li>A different way is used to solve the problem.</li> <li>Different methods used are compared to each other.</li> </ul>	<ul style="list-style-type: none"> <li>The answer is written in a complete sentence and answers the question that was asked.</li> </ul> <p><b>AND</b></p> <ul style="list-style-type: none"> <li>A second look has been taken to completely check the work and shows why the answer makes sense.</li> </ul>	<ul style="list-style-type: none"> <li>The answer is not written in a complete sentence or does not answer the question that was asked.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>Some, but not all of the work is checked.</li> </ul>	<ul style="list-style-type: none"> <li>The check doesn't work.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>The check is barely started.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>The check is not there at all.</li> </ul>

\*\*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.