

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