

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 mathematics</i> 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 plan that works best for this problem. Use pictures, charts, words, graphs and/or numbers.</i> HOW?</p>	<ul style="list-style-type: none"> A thoroughly developed plan is used. The plan uses advanced math. The plan is connected to other math ideas. 	<ul style="list-style-type: none"> The plan is complete and works. 	<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. <p>High School Essential Skills ONLY:</p> <ul style="list-style-type: none"> The plan does not use High School level math. 	<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> WHY?</p>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The path through the work is clear. <p>AND</p> <ul style="list-style-type: none"> The work leads to a clearly identified answer. Math words and symbols are used. 	<ul style="list-style-type: none"> The path is not clear or the math words and symbols do not make sense. <p>OR</p> <ul style="list-style-type: none"> The path leaves out important parts of the work. <p>OR</p> <ul style="list-style-type: none"> The answer is not identified. 	<ul style="list-style-type: none"> The path to complete the work is just started. <p>OR</p> <ul style="list-style-type: none"> The parts do not connect to each other. <p>OR</p> <ul style="list-style-type: none"> No steps are shown.
<p>Accuracy <i>The answer is...</i> IS IT RIGHT?</p>	<ul style="list-style-type: none"> The answer is correct. The outcome extends beyond the question asked. <p>OR</p> <ul style="list-style-type: none"> The outcome connects to a related math idea or question. 	<ul style="list-style-type: none"> The answer given is correct. The answer matches the work. The solution answers the question asked. 	<ul style="list-style-type: none"> The correct answer is given but the work may have a small error. The answer is wrong due to a small error. <p>OR</p> <ul style="list-style-type: none"> The work leading to an answer is correct but is not finished. 	<ul style="list-style-type: none"> The answer given is not correct. <p>OR</p> <ul style="list-style-type: none"> The answer given does not match the work. <p>OR</p> <ul style="list-style-type: none"> No answer is given.
<p>Reflecting and Evaluating <i>State and check your answer, and explain why it makes sense.</i> CHECK?</p>	<ul style="list-style-type: none"> 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. 	<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"> All of the work has been double-checked to show 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 does not 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.