Piecewise Functions Project Rubric

	20 points	15 points	10 points	5 points
Piecewise Function (times 2)	All 4 functions meet the given requirements*	3 of 4 functions meet the given requirements	2 of 4 functions meet the given requirements	1 of 4 functions meets the given requirements
Graph of your function (times 2)	All 4 'pieces' are accurate over the given intervals*	3 of the 4 'pieces' are accurate over the given intervals	2 of the 4 'pieces' are accurate over the given intervals	Less than 2 of the 4 'pieces' are accurate over the given intervals
Explanation	Explanation is thorough and provides mastery level details to include understanding of errors made during the project	Explanation is thorough but does not meet mastery level details. Student realizes errors were made but cannot explain the details of why to a mastery level	Explanation is lacking details and or student cannot explain if or why there are errors in the piece-wise graphs even when pointed out.	Explanations show minimal understanding of functions, intervals, and graphs

*Given Requirements for your piecewise function and graph:

Use the following rules/intervals:

Function 1: $(-\infty, -5)$

Function 2: $[-5, 0)$

Function 3: $[0,5)$

Function 4: $[5, \infty)$

If the function is undefined over a given interval then pick another function and include an explanation as to why the original function did not work. Make one of the functions linear, one of the functions square root, one of the functions absolute value, and the last function either exponential, quadratic or square root (one that you will be able to graph).