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Create a scenario that can be represented with a piecewise function.

- Your piecewise function must include at least 4 pieces.
- You must include at least one square root function piece, an absolute value function piece, and a rational function piece (you may include any other functions you want)
- In all except the first piece, you must use information obtained from the previous piece to solve for a parameter ( $\mathrm{a}, \mathrm{b}, \mathrm{h}, \mathrm{k}$ ).
- In one of the pieces you must include a point on the graph that is necessary to solve for an additional parameter.
- You must ask a question relating to the final piece of the function.

You must also present a solution to your question.
You will be marked on the above criteria as well as the scenario you create and your solution.
You may work alone or in pairs to complete this assignment.

