

Instructions

You are encouraged to work with others on this project. As with all writing you should work out the details in draft form before writing a final solution. You should write your solution in paragraph form using complete sentences that incorporate all symbolic mathematical expressions into the grammatical structure. You should include enough detail so that a reader can follow your reasoning and reconstruct your work. You should not show every algebraic or arithmetic step. You should do your own writing of the solution even if you have worked out the details with other people. All graphs should be done carefully on graph paper or using appropriate technology. The project is due at the beginning of class on Monday, March 4.

Your task for this project is to find a real-world application in which a function of two or three variables plays a role. You should find an application outside of mathematics and different from the examples used in our course (class or text). It might be useful to think about science or social science courses that you have taken or are taking. The function you use can be given by data, graph, or formula. You should pick an example that you think is interesting.

Your report should include at least the following:

- a description of the real-world context for the application;
- a description of the real-world meaning of the input variables and the output variable; and
- a description of the function using data, graph, or formula.