

Please indicate your solutions clearly in the document using complete sentences and brief explanations. The point is that you indicate to me what the solution is and how it relates to the context of the question being asked.

Bring your written work with you to class on the due date.

The Diet Problem

Read the case study “The Diet Problem” at the end of Chapter 5 in the text and address the five questions that follow. (I think you will find this project easier to handwrite than to typeset.) Below are some things to include. (Each item in the list pertains to the corresponding question.)

1. Give an explanation in complete sentences for the outcome being described.
2. Show only the final linear program (the one where chicken first appears) along with its corresponding optimal diet and minimum cost.
3. Show the linear program, optimal diet, and minimum calories.
4. Show the linear program, optimal diet, and minimum calories.
5. Show the linear program. If it is possible to obtain the specified diet, show the diet and its cost. If it is not possible, explain in complete sentences why it is not possible.

For the problems that require you to solve a large linear programming problem, you can use either of the following tools.

- WolframAlpha: <http://www.wolframalpha.com>
- Waner Simplex Method Tool: <http://www.zweigmedia.com/RealWorld/simplex.html>