

CS 3510: Algorithms

Assignment 7

Assignment

Problems identified by $x.y(z)$ denote the problem “y”, in chapter “x” of the textbook, with part “z”. If “z” is not noted, then the entire problem is required.

Assignment 7a

- 7.1 - Graphically solve the LP. Show the graph, the table of objective function value at each vertex of the feasible region, and the optimal vertex and object function value.
- 7.2 - Story problem to LP. (No need to solve.) Show the objective function and the constraints.

Assignment 7b

- 7.5 - a) Story problem to LP, b) solve graphically.

Assignment 7c

- 7.4 - a) Story problem to LP, b) solve graphically.
- 7.11 - a) Convert LP to dual, b) solve both graphically.

Assignment 7d

- 7.16 - Use software to solve LP.

Submission

- Submit you solutions by the due date and time. For written problems, your work and answers as a PDF to Canvas. For code, submit the source code to the class git repository. For tables and graphs, submit a PDF to Canvas.