

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.