

**Assignment 2**  
Due Monday, Oct. 2

No Lindo on this assignment! Solve by hand.

4.4.2, 4.5.3, 4.8.5, 4.11.4, 4.11.5

For 4.11.4, "Ties are broken in favor of lower numbered rows" means our usual pivoting rules.

**E.1** Solve using the Simplex Method:

$$\begin{array}{ll} \text{maximize} & z = 2x_1 + 3x_2 + 3x_3 \\ \text{subject to} & 3x_1 + 2x_2 \leq 60 \\ & -x_1 + x_2 + 4x_3 \leq 10 \\ & 2x_1 - 2x_2 + 5x_3 \leq 5 \\ & x_1, x_2, x_3 \geq 0 \end{array}$$

**E.2** Briefly discuss whether being able to avoid cycling is more important from the theoretical point of view or the practical point of view.