

- x_1 acres of land devoted to wheat
- x_2 acres of land devoted to corn
- x_3 acres of land devoted to sugar beets
- w_1 tons of wheat sold
- w_2 tons of corn sold
- w_3 tons of sugar beets sold at a favorable price
- w_4 tons of sugar beets sold at the lower price
- y_1 tons of wheat purchased
- y_2 tons of corn purchased

$$\min 150x_1 + 230x_2 + 260x_3 + 238y_1 - 170w_1 + 210y_2 - 150w_2 - 36w_3 - 10w_4$$

Subject to:

$$\begin{aligned} x_1 + x_2 + x_3 &\leq 500, \\ 2.5x_1 + y_1 - w_1 &\geq 200, \\ 3x_2 + y_2 - w_2 &\geq 240, \\ w_3 + w_4 &\leq 20x_3, \\ w_3 &\leq 6000, \\ x_1, x_2, x_3, w_1, w_2, w_3, w_4, y_1, y_2 &\geq 0, \end{aligned}$$