

Table 2 Optimal solution based on expected yields.

Culture	Wheat	Corn	Sugar Beets
Surface (acres)	120	80	300
Yield (T)	300	240	6000
Sales (T)	100	–	6000
Purchase (T)	–	–	–
Overall profit: \$118,600			

x values:

x1 = 1.19999958e+02 = 120 (x1 = acres of land devoted to wheat)

x2 = 7.99999711e+01 = 80 (x2 = acres of land devoted to corn)

x3 = 2.99999892e+02 = 300 (x3 = acres of land devoted to sugar beets)

y1 = 1.31577133e-06 = 0.0 (y1 = tons of wheat purchased)

w1 = 9.99999677e+01 = 100 (w1 = tons of wheat sold)

y2 = 1.97815401e-06 = 0.0 (y2 = tons of corn purchased)

w2 = 6.61315292e-08 = 0.0 (w2 = tons of corn sold)

w3 = 5.99999783e+03 = 6000 (w3 = tons of sugar beets sold at the favorable price)

w4 = 5.99225945e-06 = 0.0 (w4 = tons of sugar beets sold at the lower price)