

X_1 = Units of the 1.5 l COLI product to be produced

X_2 = Units of the 1.5 l PEPSA product to be produced

Maximize $4900X_1 - X_1^2 + 30X_2 - 2X_2^2 - 150(40X_1 + 20X_2)$

Subject to: $X_1 + X_2 \leq 56800$

$X_1 \leq 2X_2$

$X_1, X_2 \geq 0$