

$X_1$  = 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  $4900X_1 - X_1^2 + 30X_2 - 2X_2^2 - 150(X_1/40 + X_2/40)$

Subject to:  $X_1 + X_2 \leq 56800$

$X_1 \leq 2X_2$

$X_1, X_2 \geq 0$