

## Problem:

The profit per acre of a farm is given by

$$20L + 26F + 4LF - 4L^2 - 3F^2$$

where  $L$  = labor cost in  $\$10^3$

$F$  = fertilizer cost in  $\$10^3$

- Q1: Determine how much the farmer should spend on labor and fertilizer.
- Q2: Before solving the problem, identify the problem characteristics that will help you in selecting an appropriate algorithm.