$$f(x) = x^2 \tag{1}$$

$$f'(x) = 2x \tag{2}$$

$$F(x) = \int f(x)dx \tag{3}$$

$$F(x) = \frac{1}{3}x^3\tag{4}$$

# 1 Introduction and Examples

## 1.1 Value of the stochastic Solution

cf.  $1_{-1.jl}$ 

### 1.2 Price effect

cf. 1\_1.jl

## 1.3 Binary first stage

Set

- F: fields, index i
- P: products, index j

#### Parameter

- $field_i$ : size of field i
- plant<sub>i</sub>: unit price of planting product j
- $buy_i$ : unit price of buying product j
- $sell_i$ : unit price of selling product j
- $cattle_j$ : amount of product j to keep for the cattle
- $yield_j$ : yield of product j for an unit of a field

## Decision

- $y_j$  = quantity of product j = 1...P 1 bought
- $w_j$ = quantity of product j = 1...P + 1 sold, the last being the sugar beets sold at a lower price
- $x_{ij} = \begin{cases} 1 & \text{if field } i \text{ is full of product } j \\ 0 & \text{else} \end{cases}$