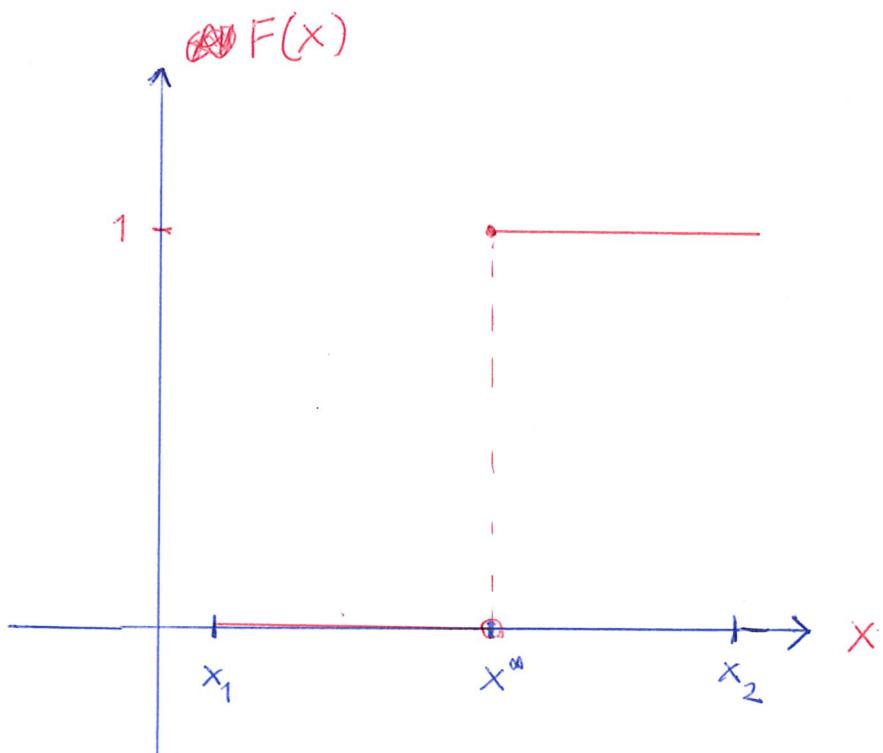


①

- Cannot be integrated
- Ex should be x^*



- Can be integrated

(2)

$$E_x = \int_{x_1}^{x_2} x dF(x)$$

$$= x F(x) \Big|_{x_1}^{x_2} - \int_{x_1}^{x_2} F(x) dx$$

$$= x_2 \cdot 1 - x_1 \cdot 0 - \int_{x^*}^{x_2} F(x) dx$$

$$= x_2 - \int_{x^*}^{x_2} 1 dx$$

$$= x_2 - x \Big|_{x^*}^{x_2}$$

$$= x_2 - (x_2 - x^*)$$

$$= x^*$$

③

