

**Definition 8.7** Let  $\hat{x}^*$  minimizes  $Ed(X, \hat{x})$  over all  $\hat{x} \in \hat{\mathcal{X}}$ , and define

$$D_{max} = Ed(X, \hat{x}^*).$$

**Note:**  $\hat{x}^*$  is not the same as  $\hat{x}^*(x)$ , and it depends on  $p(x)$ .