

### Example 3.3

- The sets  $\tilde{X}_1$  and  $\tilde{X}_2$  generate the field  $\mathcal{F}_2$ .
- There are 4 atoms in  $\mathcal{F}_2$ :

$$\tilde{X}_1 \cap \tilde{X}_2, \quad \tilde{X}_1^c \cap \tilde{X}_2, \quad \tilde{X}_1 \cap \tilde{X}_2^c, \quad \tilde{X}_1^c \cap \tilde{X}_2^c$$

- There are a total of  $2^4 = 16$  sets in  $\mathcal{F}_2$ , formed by the unions of the above 4 atoms.