

$$\mathfrak{p} \triangleleft \mathbb{1} = \frac{\mathfrak{p} \triangleleft \mathbb{1}}{\mathfrak{p} \text{ prim}}$$

$$\mathcal{I} \setminus_{\mathfrak{p}} \mathfrak{p} \triangleleft \mathbb{1} = \frac{\text{prim } \mathfrak{p} \triangleleft \mathbb{1}}{\mathcal{I} \subset \mathfrak{p}} \subset \mathfrak{p} \setminus_{\mathfrak{p}} \mathfrak{p} \triangleleft \mathbb{1}$$

$$\emptyset = \mathbb{1} \setminus_{\mathfrak{p}} \mathfrak{p} \triangleleft \mathbb{1}$$

$$\mathfrak{p} \triangleleft \mathbb{1} = 0 \setminus_{\mathfrak{p}} \mathfrak{p} \triangleleft \mathbb{1}$$

$$\bigcap_{\mathcal{I}} \mathcal{I} \setminus_{\mathfrak{p}} \mathfrak{p} \triangleleft \mathbb{1} = \bigcup_{\mathcal{I}} \mathcal{I} \setminus_{\mathfrak{p}} \mathfrak{p} \triangleleft \mathbb{1}$$

$$\mathcal{I} \setminus_{\mathfrak{p}} \mathfrak{p} \triangleleft \mathbb{1} \cup \mathcal{J} \setminus_{\mathfrak{p}} \mathfrak{p} \triangleleft \mathbb{1} = \mathcal{IJ} \setminus_{\mathfrak{p}} \mathfrak{p} \triangleleft \mathbb{1}$$

$$\mathcal{II} \subset \mathfrak{p} \Rightarrow \mathcal{I} \subset \mathfrak{p}$$

$$\mathfrak{p} \setminus_{\mathfrak{p}} \mathfrak{p} \triangleleft \mathbb{1} = \left\{ \mathfrak{p} \triangleleft \mathbb{1} \right\}$$