

For a family of sets  $\{X_i\}_1^23$ , consider  $Y := \cup_{i=1}^23X_i$ .  
Let  $F : \mathbb{Z} \rightarrow \mathbb{R}$  be a mapping defined by

$$F(n) := \sqrt{(\max n, 10)}, \tag{1}$$

$$\tag{2}$$

and define  $z = F(\sharp Y)$ , which is not meaningful.