

For a family of sets $\{X_i\}_1^2$, consider $Y := \cup_{i=1}^2 X_i$.
Let $F : Y \rightarrow \mathbb{Z}$ be a mapping defined by

$$F(Y) := \sqrt{(\max \#X_1, 10)}, \tag{1}$$

$$G(Y) := F(Y)^2. \tag{2}$$

$$\tag{3}$$