For a family of sets $\{X_i\}_1^{23}$, consider $Y := \bigcup_{i=1}^{23} X_i$.

Let $F\colon Y \to \mathbb{Z}$ be a mapping defined by

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

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