$$T_{\infty} = \left\{ U \subseteq X \mid U^{C} \text{ suffinite or } X \text{ or } \Phi \right\}$$

$$\Phi_{1} X \text{ in } Y_{\infty}$$

$$Y_{1} = U Y_{1}^{C} \subset \text{should all be in finite}$$

$$V_{1} = \bigcap_{i=1}^{N} (Y_{i}^{C})$$

$$V_{1} = \bigcap_{i=1}^{N} (Y_{i}^{C})$$

$$\begin{array}{ll}
\text{i=1} & \text{i=2} \\
\text{i=1} & \text{i=1} \\
\text{i=1} & \text{i=1}
\end{array}$$

$$Y_{i} = \bigcap (Y_{i}^{c})$$

$$[\frac{1}{n}, \frac{1}{n}] = (-\infty, \frac{1}{n}) \cup (\frac{1}{n}, \infty)$$

$$\bigcup_{n=1}^{\infty} (-\infty, \frac{1}{n}) \cup (\frac{1}{n})$$

