

1. Please legibly print your name. Brock Francom

2. Please sign your name. 

3. Examine each of the following propositions to determine whether it is true or not; indicate your decision by circling either "T" or "F":

A. $A, B \in \{\text{sets}\} \rightarrow A \subseteq A \times B$

T ☒ F

B. $\exists A, B \in \{\text{sets}\} \ni A \subseteq A \times B$

☒ T F $A = \{\emptyset\}$ $A \times B = \{\emptyset\}$
 $B = \{\emptyset\}$

C. $\exists A, B \in \{\text{sets}\} - \{\emptyset\} \ni A \subseteq A \times B$

T ☒ F

D. $\{r : r \text{ is a relation on } \{0, 1\}\}$ contains exactly 16 elements

☒ T F

There are 16 elements.

4. Smile.

