

ICS 252–Discrete Structures

Quiz # 1

Name:

ID#:

State whether the following statements are true or false **and correct the false ones**.

1. $|\{x \mid x \in \mathbb{Z}, \text{ and } x^2 = 2\}| \geq 1$

2. $\{a\} \subseteq \{\{a\}, \{a, \{a\}\}\}$

3. $A \in \mathcal{P}(S) \iff A \subseteq S$

4. $|\mathcal{P}(\{\phi, \{1, \{2\}\}, \{b\}\})| = 2^4$

5. There is not any set A such that $\mathcal{P}(A) = \phi$