CISC102 - Discrete Math I

July 2018

Assignment 1 - Problem 9

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A) Prove that $A \subseteq B \rightarrow A \cap \bar{B} = \emptyset$

If $A \subseteq B$

Then, $A \nsubseteq \bar{B}$

Therefore, $A \cap \bar{B} = \emptyset$ ■

B) Prove that $A \cap \bar{B} = \emptyset \rightarrow A \subseteq B$

If $A \cap \bar{B} = \emptyset$

Then, $A \cap B = A$

Therefore, $A \subseteq B$ ■