Show All Solutions

Rosen, Discrete Mathematics and Its Applications, 7th edition
Extra Examples
Section 2.2—Set Operations

Extra Examples — *Page references correspond to locations of Extra Examples icons in the textbook.*

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p.130, icon at Example 10
#1. Prove that the following is true for all sets A, B, and C: if $A \cap C \subseteq B \cap C$ and $A \cap \overline{C} \subseteq B \cap \overline{C}$, then $A \subseteq B$.

See Solution

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p.130, icon at Example 10
#2. Prove that the following is true for all sets A, B, and C: if $A \cap C = B \cap C$ and $A \cup C = B \cup C$, then $A = B$.

See Solution

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p.130, icon at Example 10
#3. Use logical equivalence to show that $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$

See Solution

p.130, icon at Example 10
#4. Prove: if $A \subseteq \overline{B}$, then $B \subseteq \overline{A}$.

See Solution

p.130, icon at Example 10
#5. Prove: If $A \subseteq B$ and $C \subseteq D$, then $A \cap C \subseteq B \cap D$.

See Solution