

2.5.2

1. $\overline{A} \cap (A \cup B) = \overline{A} \cap B$ — Given
2. $(\overline{A} \cap A) \cup (\overline{A} \cap B)$ — Distributive law
3. $\emptyset \cup (\overline{A} \cap B)$ — Complement law
4. $\overline{A} \cap B$ — Identity law