

De Morgan's Law Worksheet

Simplify the following Boolean Expressions:

1. $\bar{A} \cdot \bar{B} = \overline{A + B}$

2. $\bar{A} + \bar{B} = \overline{A \cdot B}$

3. $\overline{\bar{A} \cdot B} = A + \bar{B}$

4. $\overline{A + A \cdot B} = \overline{A(1 + B)} = \bar{A}$

5. $\overline{A + A \cdot \bar{B}} = \bar{A}$

6. $\bar{A} + \overline{\bar{A} \cdot \bar{B}} = \bar{A} + A + B = 1$

7. $\overline{B + \overline{\bar{B} \cdot A}} = \bar{B} \cdot B \cdot A = 0$