

BOOLEAN ALGEBRA

1. Simplify the following Boolean expression:

$$(\overline{A}B + \overline{B})(A + B)(\overline{A}B + \overline{A})$$

$$A \oplus B$$

2. How many ordered triples make this Boolean expression TRUE?

$$(A + \overline{B}C)(BC + \overline{A}) + A(B + \overline{C})(\overline{A} + \overline{B}\overline{C})$$

3

3. Which ordered triple(s) make the following Boolean expression TRUE?

$$(\overline{A}B + \overline{B}C)(\overline{A}B\overline{C} + A\overline{B}C)$$

101, 010

4. How many ordered triples make this Boolean expression TRUE?

$$\overline{A}B + B(C + \overline{A}) + \overline{B}C + A\overline{B}\overline{C}$$

6