Quiz Questions for: __________________________

Name: __________________________

Quiz 2: Ashenden 2.1-2.1.1 – Boolean Functions

1. What is a truth table?
2. Draw the truth table for the logical OR.
3. Draw the truth table for the logical AND.
4. Draw the truth table for the logical NOT.
5. Draw the truth table for the Boolean expression \( f = (x + y) \cdot \overline{z} \)
6. How many combinations exist for an expression with \( n \) distinct variables?
7. What is a minterm?
8. What is a sum-of-products?
9. Draw the truth table for the logical NOR.
10. Draw the truth table for the logical NAND.
11. Draw the truth table for the logical XOR.
12. What is the symbol and truth table for a buffer.
13. What is the purpose of the don’t-care notation?
14. Draw the truth table for a multiplexer using the don’t-care notation.