

## 1 True or False (5 Pts)

1. T / F : There are three unique digits in the binary number system.
2. T / F : The power supply directly supplies power to the every component of the computer.
3. T / F : True  $\vee$  False
4. T / F : Typically on a desktop computer, RAM slots directly into the motherboard.
5. T / F : Solid state drives use a spinning disk to store information.

## 2 Show Your Work

### Problem 1 (3 Pts)

Convert the decimal number 302 to binary (Show your work):

### Problem 2 (3 Pts)

Convert the binary number 10011101 to decimal (Show your work):

**Problem 3 (4 Pts)**

Compute the truth table for the following boolean expression:

$$\neg(X \vee Y) \Rightarrow Z$$

**3 Short Answer****Question 1 (2.5 Pts)**

Describe the benefits of programming languages over coding in binary:

**Question 2 (2.5 Pts)**

Explain the difference between Storage and Memory in computers: