```
1. #1
                         n-type
                                   p-type
       a. Gate = 1
                      closed circuit open circuit
                      open circuit closed circuit
       b. Gate = 0
2. #2
       a. 1
       b. 0
       c. 1
       d. 0
       e. 1
       f. 0
       g. 0
       h. 0
3. #3
       a. C
               i. 1
              ii. 1
              iii. 0
              iv. 0
       b. D
               i. 1
              ii. O
              iii. 1
              iv. 0
       c. Z
               i. 0
              ii. O
              iii. 0
              iv. 1
              v. Z is only on if both C and D are off
4. #4
       a. NOT(NOT(A) OR NOT(B))
               i. 0
              ii. O
              iii. 0
              iv. 1
              v. AND
5. #5
       a. A NOR B
               i. 1
              ii. 0
              iii. 0
              iv. 0
6. #6
```

a. Z

- i. 0
- ii. 0
- iii. 0
- iv. 0
- v. 0
- vi. 0
- vii. 0
- viii. 0

7. #7

- a. Sum
 - i. 0
 - ii. 1
 - iii. 1
 - iv. 0
 - v. 0
 - vi. 0
 - vii. 1
- b. Carry
 - i. 0
 - ii. 0
 - iii. O
 - iv. 1
 - v. 0
 - vi. 1
 - vii. 1
 - viii. 1