Digital Test 1 Review

Convert the following to decimal.

1) 1100101_2 = _____ $_{10}$

2) 100101_2 = _____ $_{10}$

3) 1111010_2 = _____ $_{10}$

4) 37_8 = _____ $_{10}$

5) 51_8 = _____ $_{10}$

6) 5_8 = _____ $_{10}$

7) ACE_{16} = _____ $_{10}$

8) 127_{16} = _____ $_{10}$

9) $B8C_{16}$ = _____ $_{10}$

Convert the following to the given base. Show work on sheet provided.

10) 75_{10} = _____ $_8$

11) 11001111_2 = _____ $_8$

12) 1011100101_2 = _____ $_8$

13) 10011111001_2 = _____ $_{16}$

14) 110101111000_2 = _____ $_{16}$

15) 100111110000_2 = _____ $_{16}$

16) 37_8 = _____ $_2$

17) 276_8 = _____ $_2$

18) $B3C_{16}$ = _____ $_2$

19) 197_{16} = _____ $_2$

Write the Boolean Expression at the output.

20)
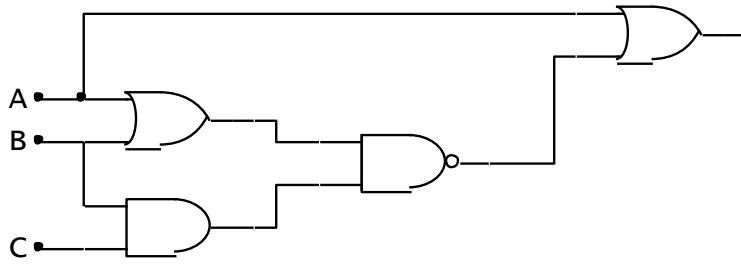
21)

Draw the logic diagram.

22) (A + B) C

23) (ABC + CD)

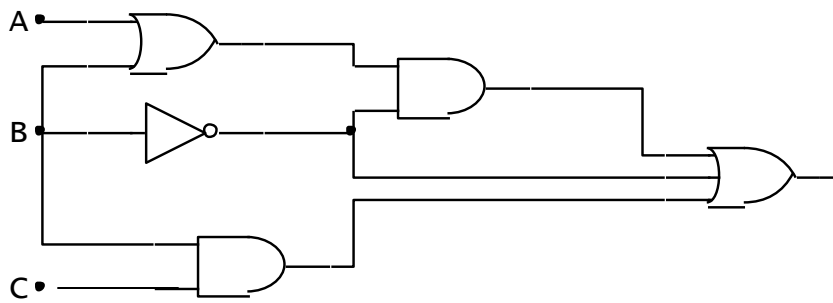24) $\overline{\overline{AD}+\overline{CD}} + \overline{(B+\overline{D})}$

Draw the logic diagram, **and Construct** a truth table.

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

A	B	C								

26) A B + A C

A	B	C								

Predict the output with the given inputs.
Answer should be a 0 or 1

27.

28.

29.

30.

31.

32.