

## Tutorial\_1\_ECN-104

Question 1: Convert the following decimal numbers to their binary equivalents:

(a) 64, (b) 100, (c) 111, (d) 145, (e) 255, (f) 500.

Question 2: Convert the following decimal numbers to their binary equivalents:

(a) 34.7510, (b) 25.25, (c) 27.1875

Question 3: Convert each of the following binary numbers to octal, decimal, and hexadecimal formats.

- a)  $(111011101)_2$
- b)  $(10101010111)_2$
- c)  $(111100000)_2$

Question 4: Convert each of the following octal numbers to binary, decimal, and hexadecimal formats.

- a)  $(3754)_8$
- b)  $(7777)_8$
- c)  $(247)_8$

Question 5: Convert each of the following decimal numbers to binary, octal, and hexadecimal formats.

- a)  $(3479)_{10}$
- b)  $(642)_{10}$
- c)  $(555)_{10}$

Question 6: Convert each of the following hexadecimal numbers to binary, octal, and decimal formats.

- a)  $(4FB2)_{16}$
- b)  $(88BAE)_{16}$
- c)  $(DC4)_{16}$

Question 7: What is the Boolean expression for the AND-OR logic diagram in Fig.1?

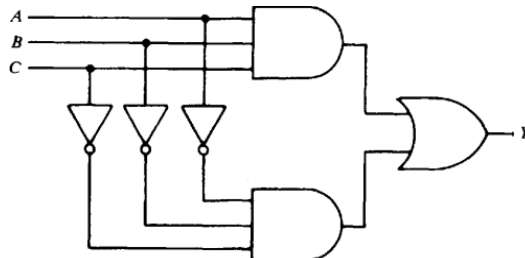


Fig. 1

Question 8: What is the truth table for the logic diagram in Fig. 1

Question 9: What is the Boolean expression for the AND-OR logic diagram in Fig. 2

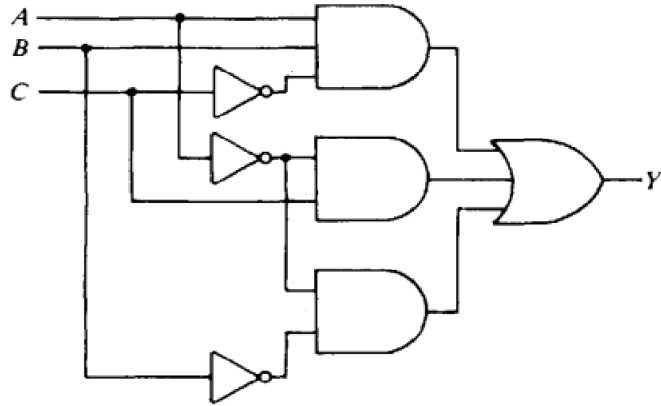


Fig. 2 AND-OR logic-circuit problem

Question 10: What is the truth table for the logic diagram in Fig. 2