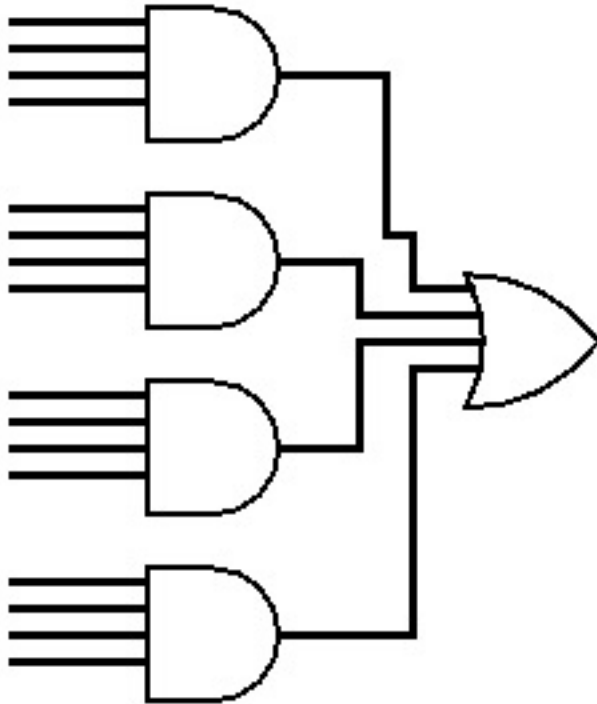


Kurt Medley

Problems - MB Ch 5 p78: 2,3,4,5,16,17,18,19,20,21,22,23

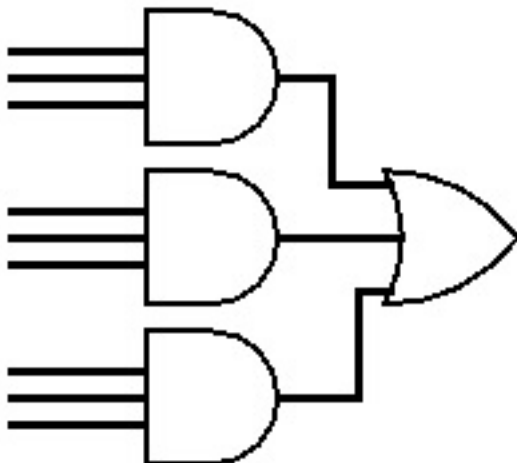
2. a) $\neg A \neg B C D$ b) $\neg A B \neg C D$ c) $A \neg B \neg C \neg D$ d) $A B \neg C D$

3. This circuit represents the boolean equation $Y = \neg A \neg B C D + A \neg B C D + A B \neg C D + A B C \neg D$ in descending order starting from the top AND gate into the OR gate.



4. $Y = \neg A \neg B C D + \neg A B C \neg D + A B C \neg D$

5. This circuit represents the boolean equation $Y = A \neg B \neg C \neg D + A B \neg C \neg D + A B C D$ in descending order starting from the top AND gate into the OR gate



$$16. A + 0 = A$$

$$17. A * 1 = A$$

$$18. A + 1 = 1$$

$$19. A * 0 = 0$$

$$20. A(-A + B) = AB$$

$$21. a) A + B = B + A$$

$$b) AB = BA$$

$$22. a) A + (B + C) = (A + B) + C$$

$$b) A(BC) = (AB)C$$

$$23. A(B+C) = AB+AC$$