Prove that-

A∩(B∪C) = (A∩B) ∪ (A∩C)

Let x ∈ A ∩ (B U C).

Then x ∈ A and x ∈ (B U C).

(x ∈ A and x ∈ B) or (x ∈ A and x ∈ c).

x ∈ (A and B) or x ∈ (A and c).

x ∈ (A ∩ B) U (A ∩ C).

Related posts:

1. SET
2. Mathematical induction
3. Relation
4. Net 34
5. prove that- AX(B∩C) = (AXB) ∩ (AXC)
6. prove that – (A∩B)X(C∩D) = (AXC)∩(BXD)
7. Show that- (P∩Q)X(R∩S) = (PXR)∩(QXS)
8. Binary operations
9. Algebraic structure
10. Group
11. Show that (..., -4, -3, -2, -1, 0, 1, 2, 3, 4,...} is group
12. Show that a*b=b*a
13. if a*c = c*a and b*c = c*b, then (a*b)*c = c*(a*b)
14. Undirected Graph and Incident Matrix
15. Prove the following by using the principle of mathematical induction for all n ∈ N, 1^3 +

$2^3 + 3^3 + \ldots + n^3 = [n\,(n + 1)/2]^2$

16. Prove that $G=\{-1,1,i,-i\}$ is a group under multiplication.
17. Hasse diagram for the “less than or equal to” relation on the set S= { 0,1,2,3,4,5}