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CS-225: Discrete Structures in CS

Homework 4, Part 2

Exercise Set 6.2 of the required textbook : Problem #6 (part 2), #11, #17 and   
Exercise Set 6.3 of the required textbook: Problem  #15, #38, # 42

6 (part 2).

1. Or
2. And
3. Subsets

11.

Suppose x is any element of:

Since the subset has an intersect of all common elements of A, B and . Therefore it is a subset of

17.

We know that all elements of A are in B because A is a subset of B.

Due to the fact that A is contained in B and C is contained in itself as an element,

15. The statement is false because the order of operations makes the statement:

For any arbitrary element x,

By definition of inclusion in union, x cannot ∉ C as a subset of x ∈ C. Thus the statement cannot be true.

38. [False]

42.