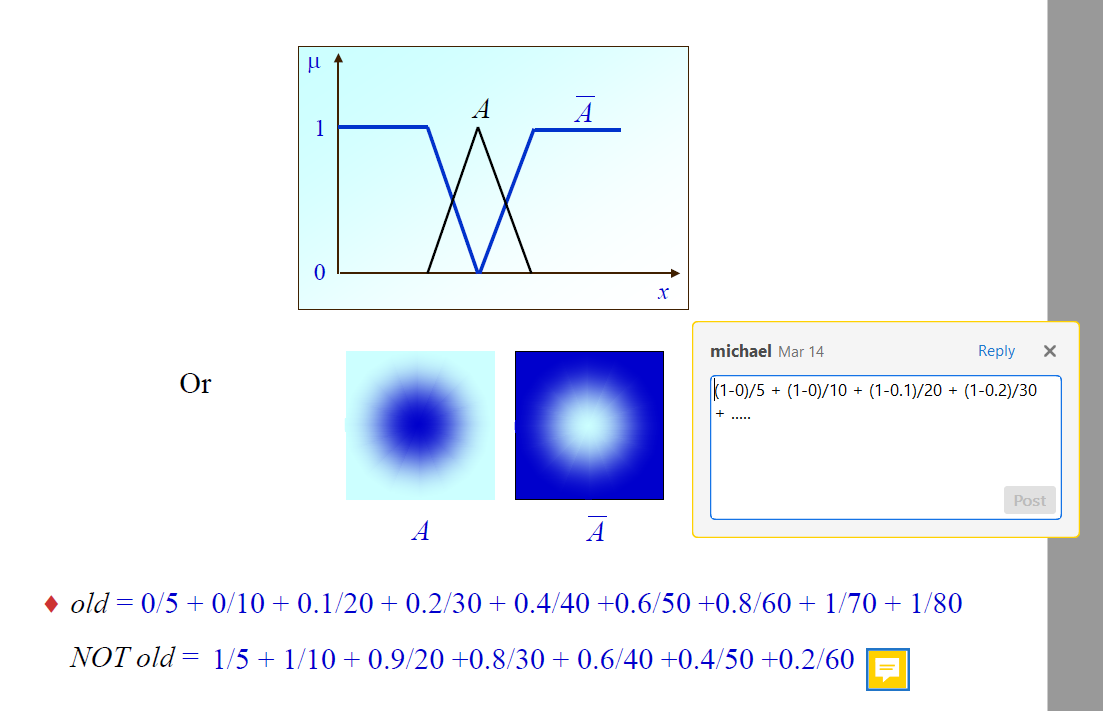
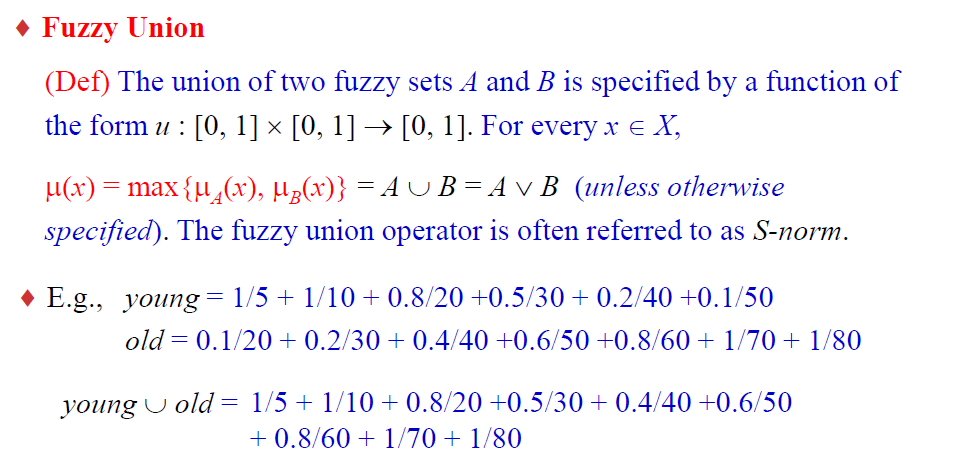


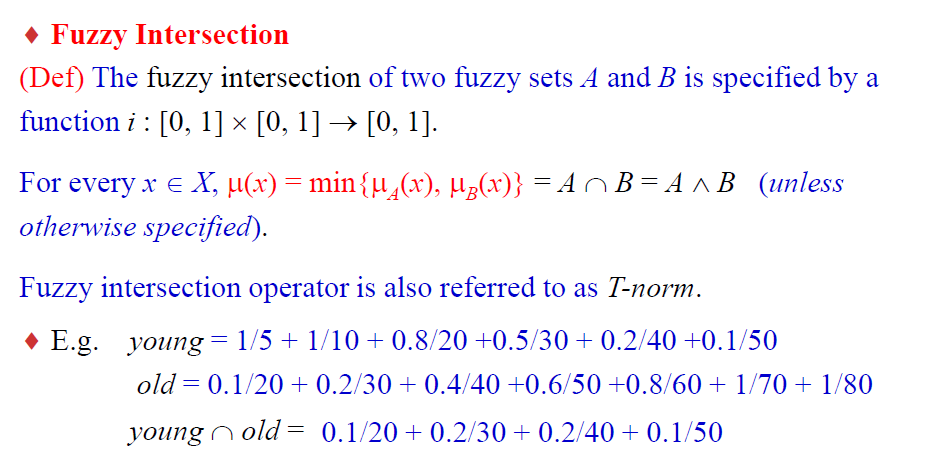
**Fuzzy Complement**

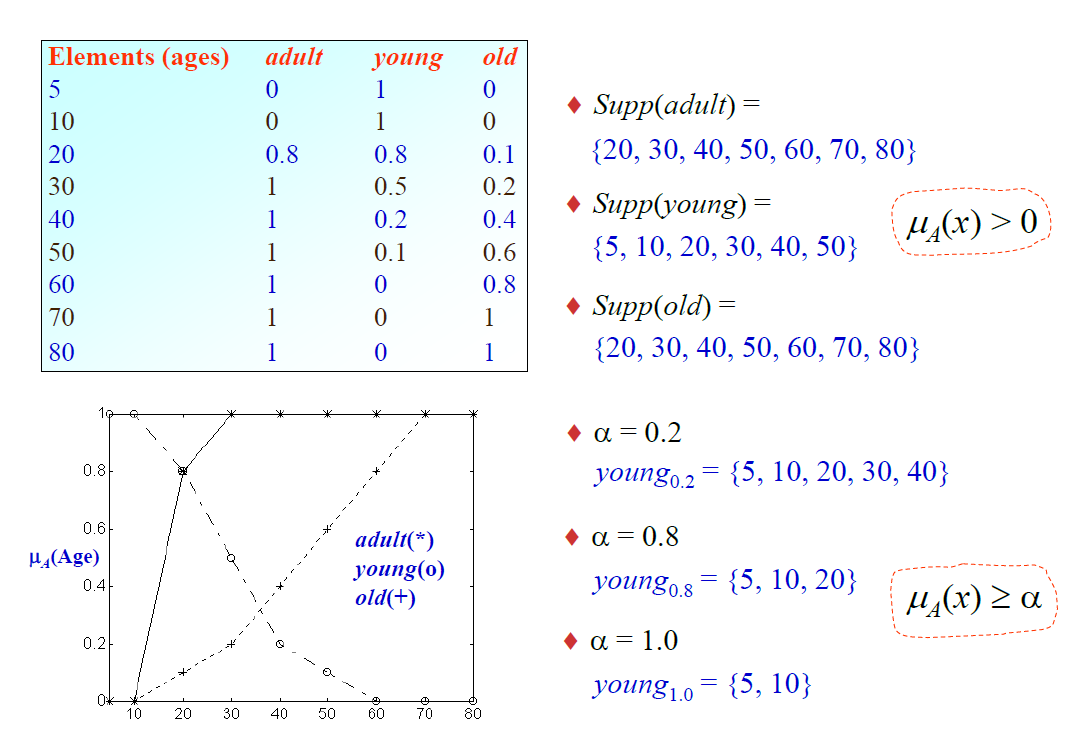


**Fuzzy Union**

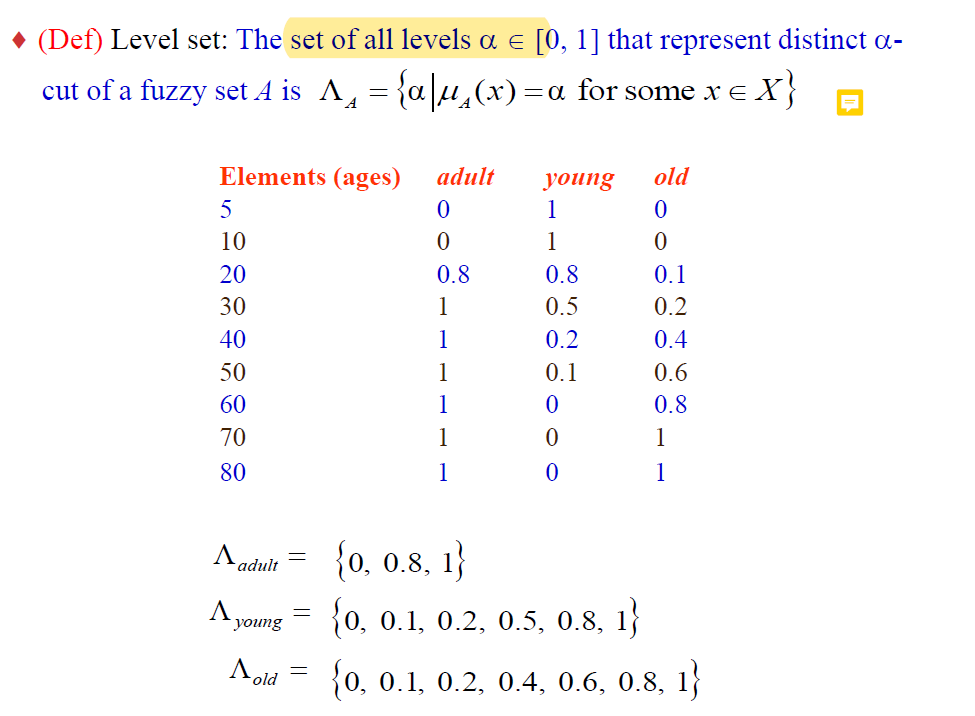


**Fuzzy Intersection**

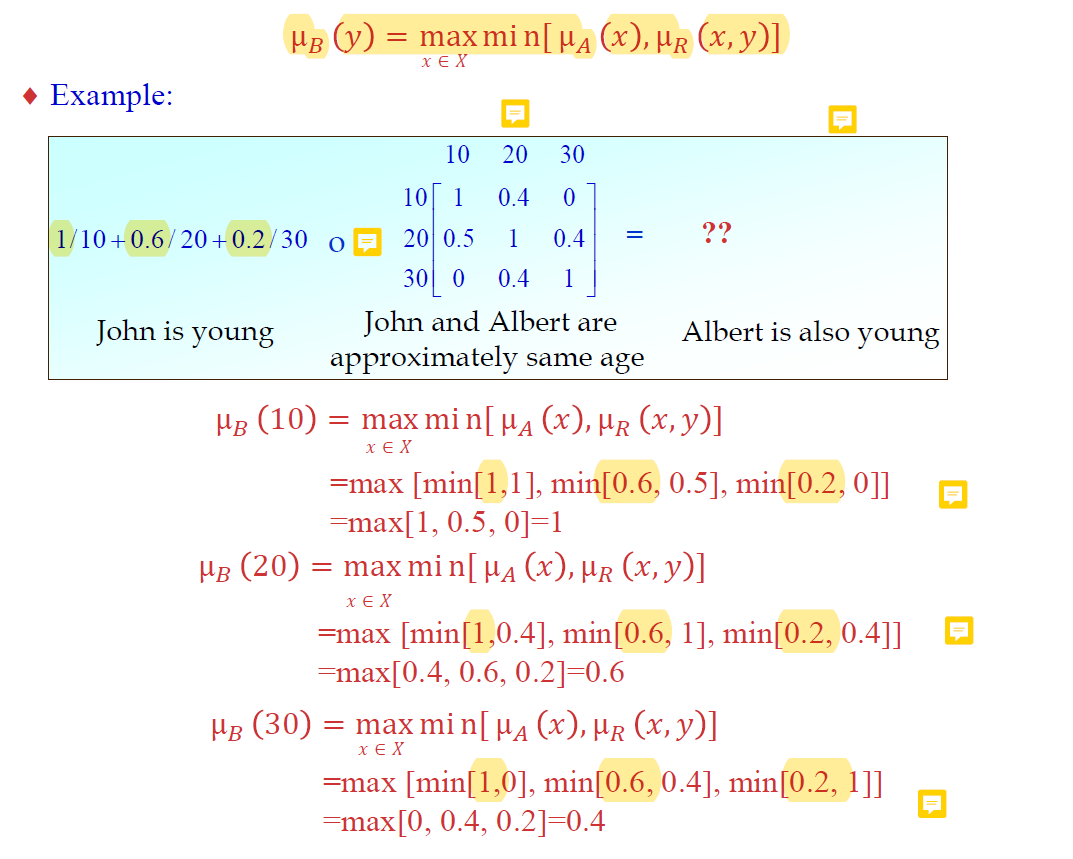


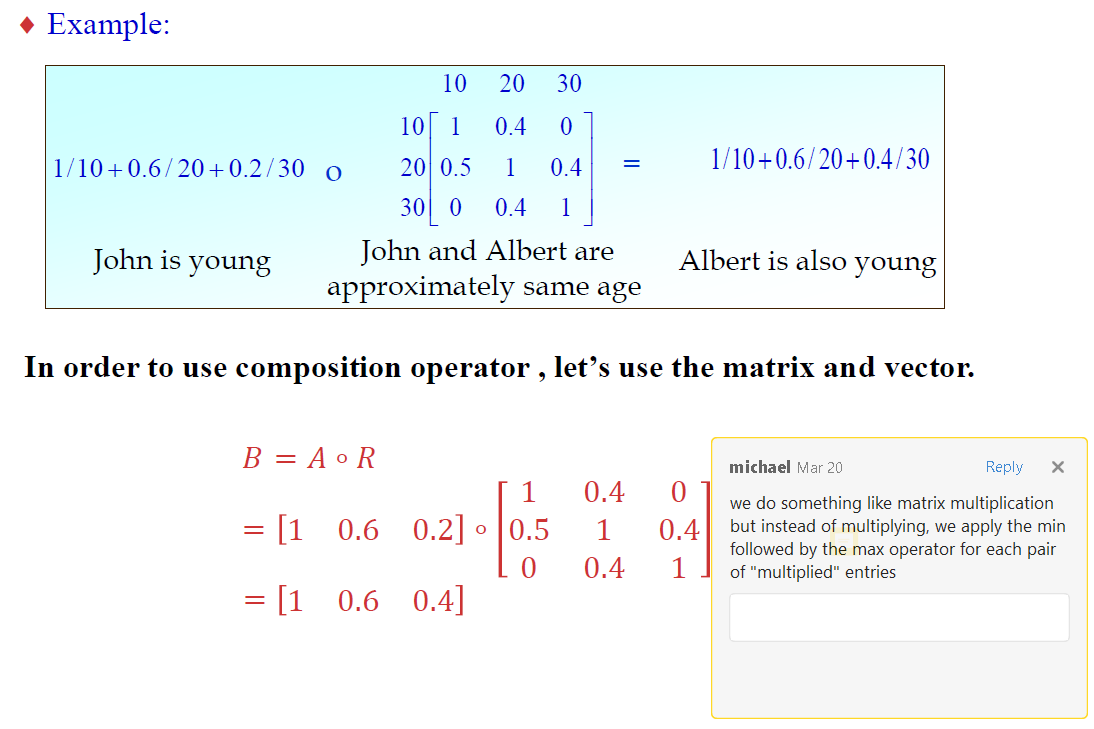
**Finding support (not important) and alpha cut (important) of a fuzzy set**

**Level Set**

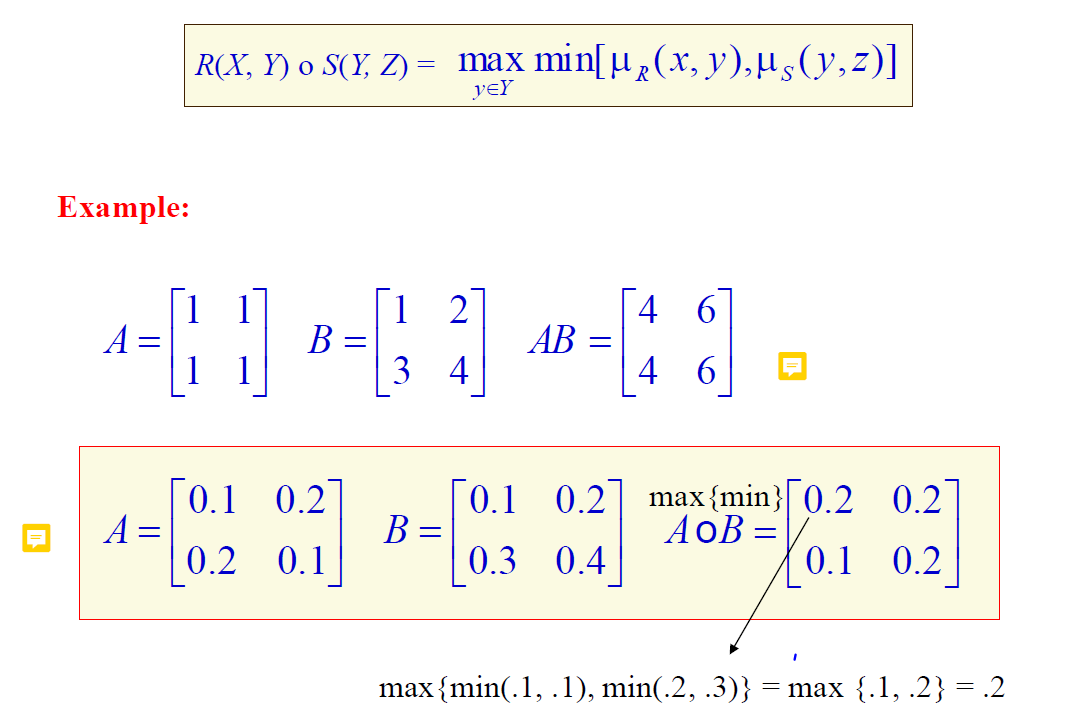


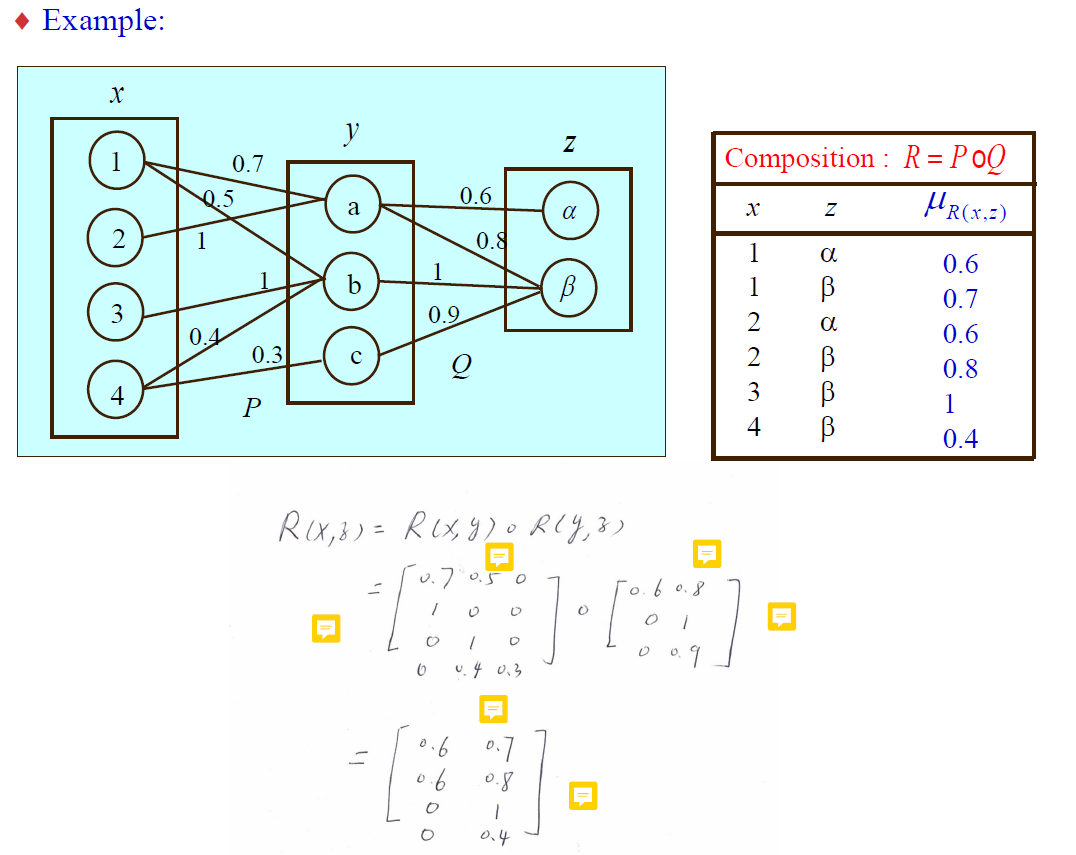
**Find membership function of set B given membership function of set A and the membership function of the fuzzy relation of set A and B (normal calculation and matrix method)**



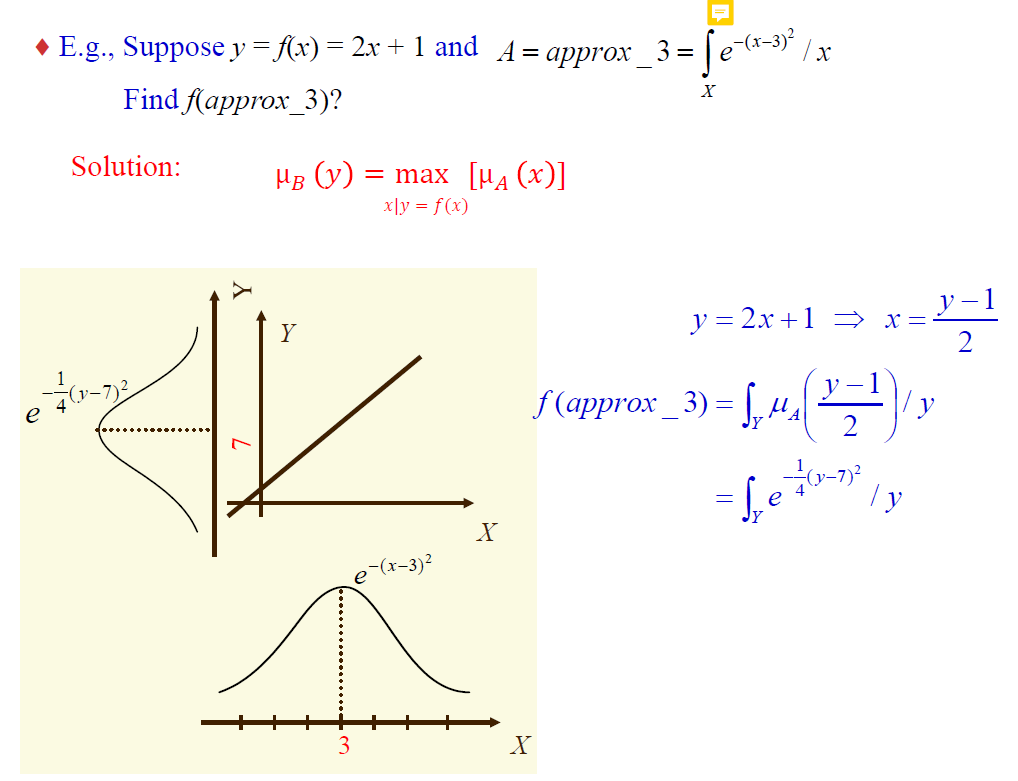


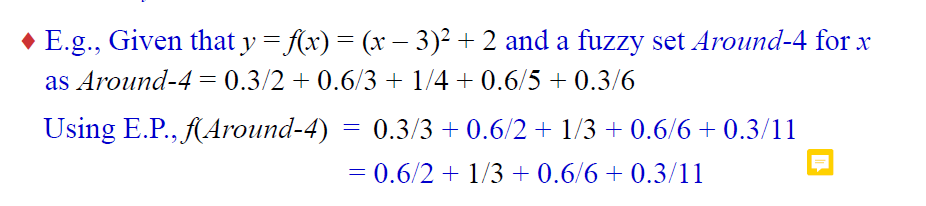
**Fuzzy Composition**

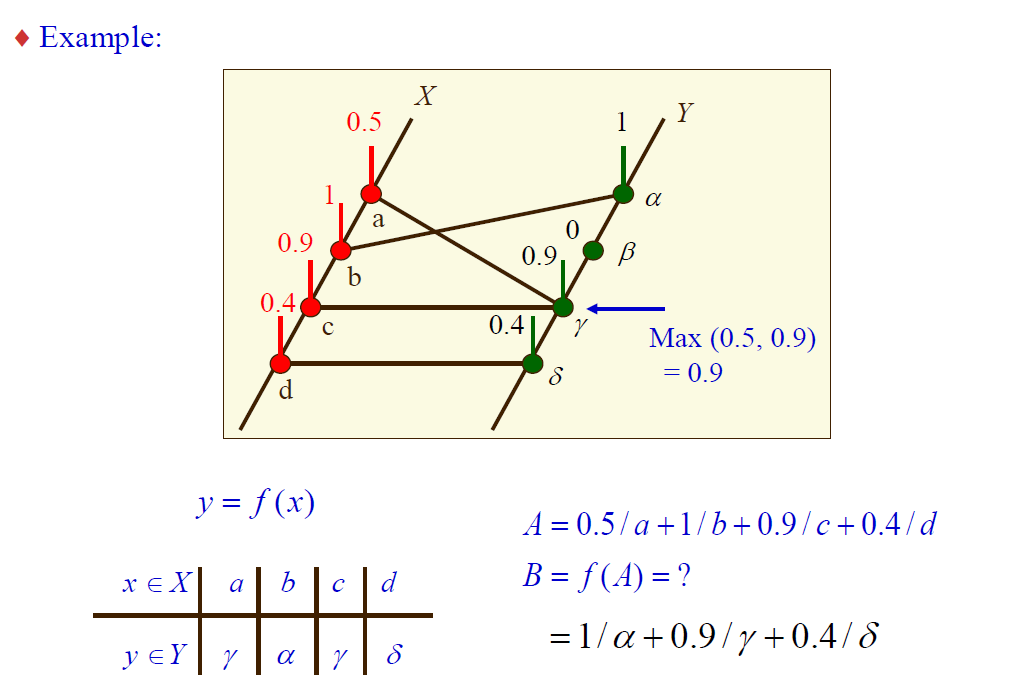




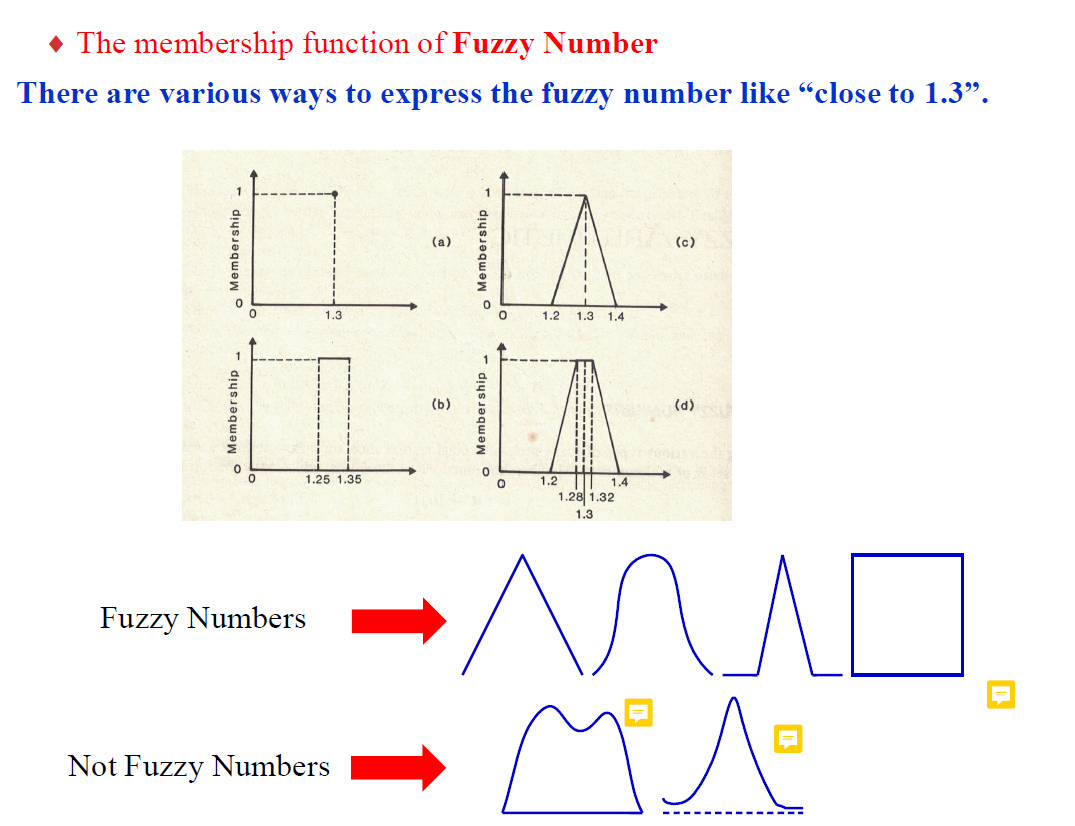
**Extension principle (quite similar to fuzzy relation. In this case, a function is used to map set A to set B. Unlike previous example, both the membership function and elements in the sets will change in extension principle.)**



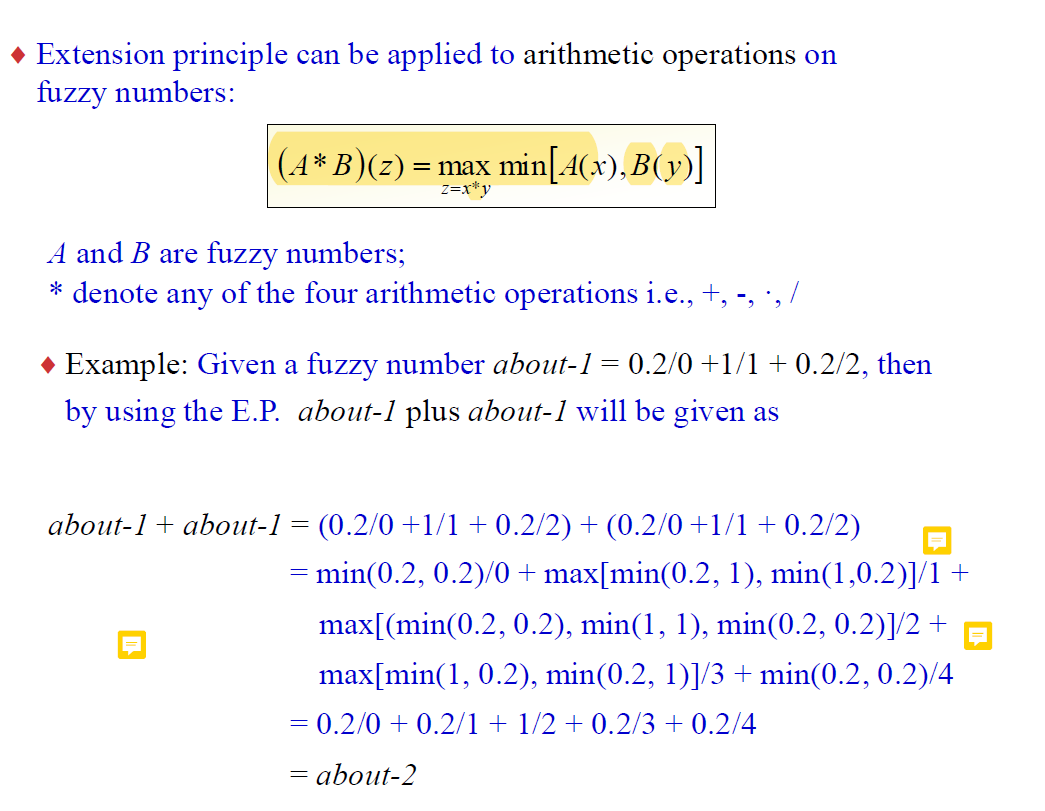




**Examples of fuzzy numbers**



**Arithmetic operations on fuzzy numbers (discrete case)**



**Arithmetic operations on fuzzy numbers (continuous case)**

