Example 1:

the classical sets defined on universe $X = \{ \text{ Set of all 'n' natural no} \}$

$$A = \{9,5,6,8,10\}$$
 , $B = \{1,2,3,7,9\}$, $C = \{1,0\}$

Prove the classical set properties associativity and distributive

Example 2:

Consider
$$X = \{a, b, c, d, e, f, g, h\}$$
., $A = \{a, d, f\}$

Prove identity property.

Example 3:

represented the set

$$X = \{ : 0 \le x \le 20 \}$$

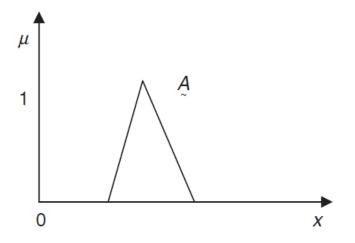
 $A = \{x : 5 \le x \le 15 \}$
 $B = \{ : 10 \le x \le 18 \}$

Fuzzy Sets

A fuzzy set is thus a set containing elements that have varying degrees of membership in the set.

This idea is in <u>contrast</u> with classical or crisp, set because members of a crisp set would not be members unless their membership were complete, in that set (i.e., their membership is assigned a value of 1). then the mapping is given by:

$$\mu_A(x) \in [0,1].$$



Membership function of fuzzy set A