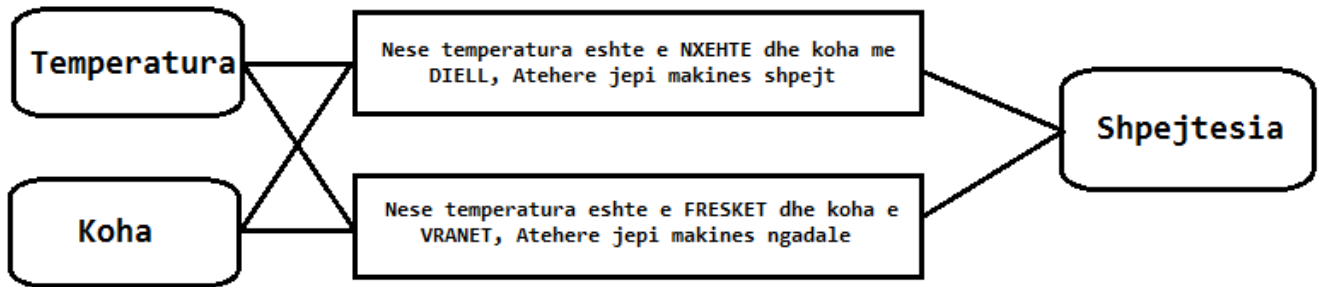
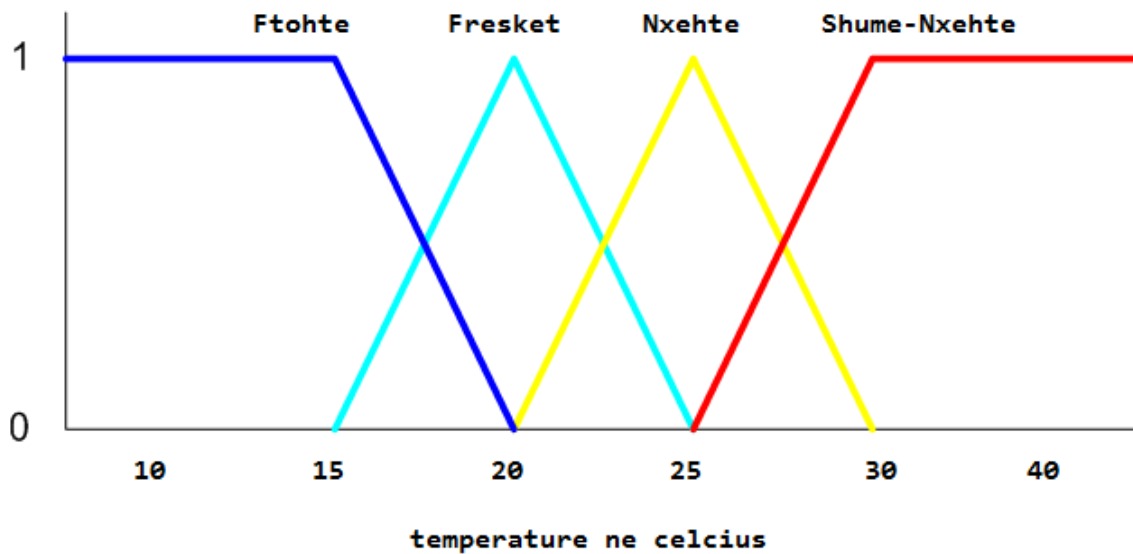


Shpejtesia e makines ne varesi te temperatures dhe kohes



Hyrja 1 - Temperatura: [Ftohte, Fresket, Nxehte dhe Shume-Nxehte)



Kufiri i vlerave te temperatures:

[10 40]

Kufiri i vlerave te variablit “ftohte”:

[0 0 15 20]

(tipi trapmf)

Kufiri i vlerave te variablit “fresket”:

[15 20 25]

(tipi trimf)

Kufiri i vlerave te variablit “nxehte”:

[20 25 30]

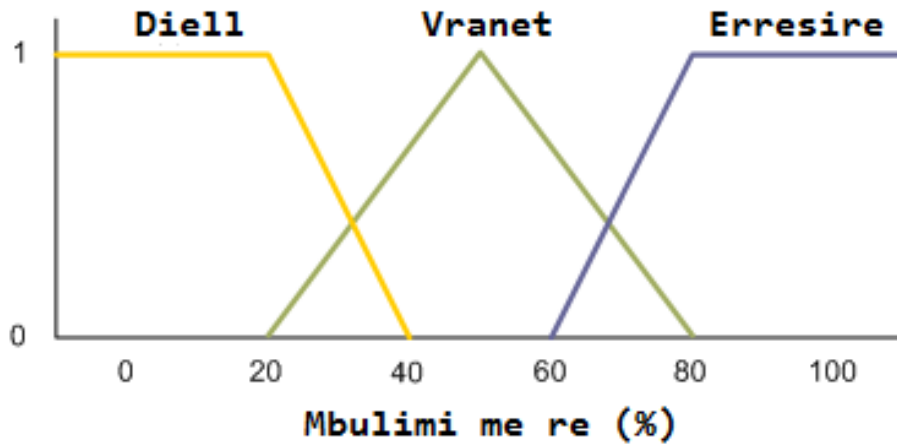
(tipi trimf)

Kufiri i vlerave te variablit “shume-nxehte”:

[25 30 50 50]

(tipi trapmf)

Hyrja 2 - Koha: [Diell, Vranet dhe Erresire]



Kufiri i vlerave te temperatures:

[0 100]

Kufiri i vlerave te variablit “diell”:

[0 0 20 40]

(tipi trapmf)

Kufiri i vlerave te variablit “vranet”:

[20 50 80]

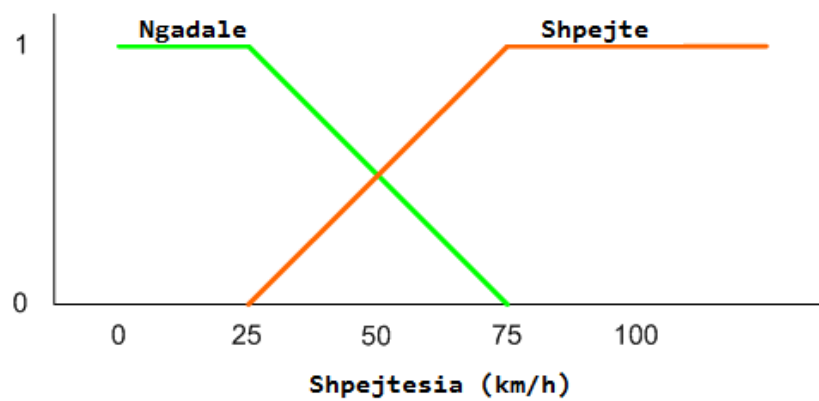
(tipi trimf)

Kufiri i vlerave te variablit “erresire”:

[60 80 100 150]

(tipi trapmf)

Dalja – Shpejtesia: [Ngadale dhe Shpejte]



Kufiri i vlerave te temperatures:

[0 100]

Kufiri i vlerave te variablit “ngadale”:

[0 0 25 75]

(tipi trapmf)

Kufiri i vlerave te variablit “shpejte”:

[25 75 110 110]

(tipi trapmf)

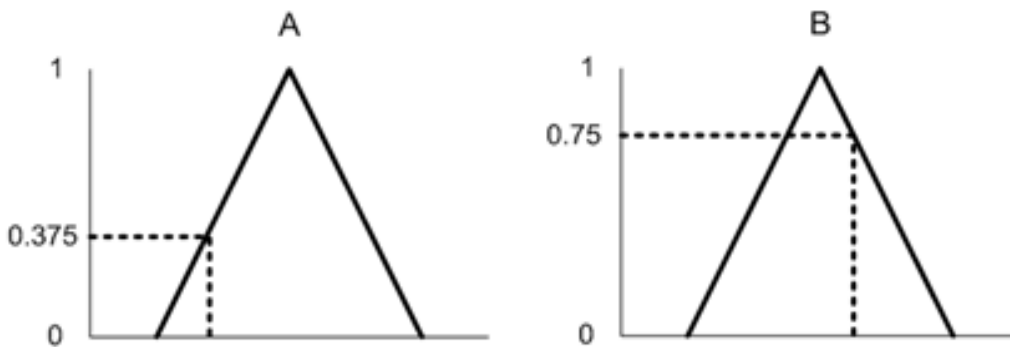
Vendosja e rregullave:

1. NESE eshte **Diell** dhe **Nxehte**, ATEHERE jepi makines **Shpejt**
(Mbulimi me re) $Diell \wedge (Temperatura) Nxehte \implies Shpejtesia$ (shpejte)
2. NESE eshte **Vranet** dhe **Fresket**, ATEHERE jepi makines **Ngadale**
(Mbulimi me re) $Vranet \wedge (Temperatura) Fresket \implies Shpejtesia$ (Ngadale)

Modifikimi i Logjikes-Fuzzy

1. Operatori i Bashkimit

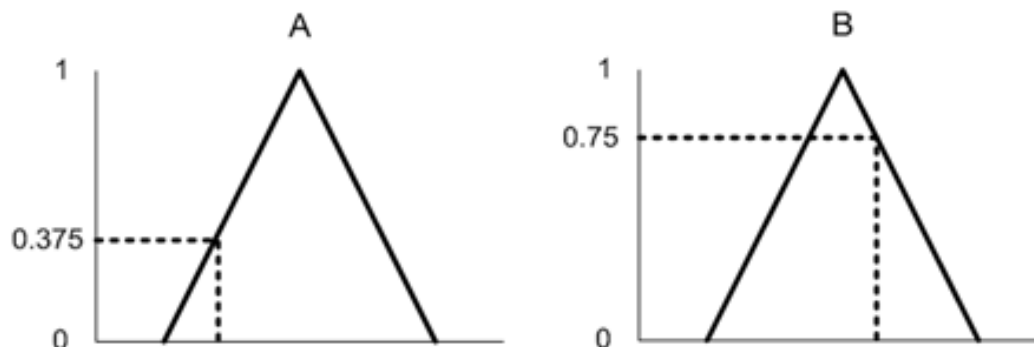
- $A \vee B$ $\max(A, B)$
- $A \vee B = C$ "Sasia (vlere) C eshte bashkimi i sasise (vleres) A dhe B"



$(A \vee B = C) \implies (C=0.75)$

2. Operatori i Prerjes (ndarjes)

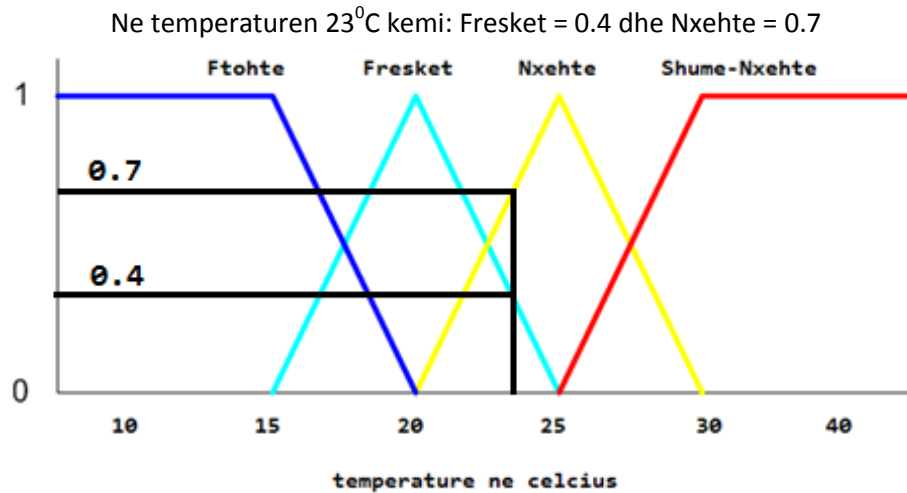
- $A \wedge B$ $\min(A, B)$
- $A \wedge B = C$ "Sasia (vlere) C eshte "prerja" e sasise (vleres) A dhe B"



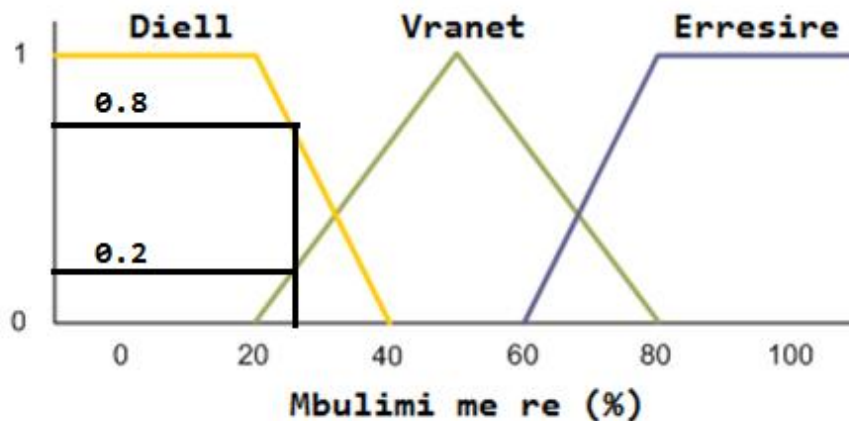
$(A \wedge B = C) \implies (C=0.375)$

Sa eshte shpejtesia mesatare nese:

1. Temperatura = 23°C
2. Koha = 25% me diell



Ne mbulimin me re 25% kemi: Diell = 0.8 dhe Vranet = 0.2



1. NESE eshte Diell **DHE** Nxehte, ATEHERE jepi makines Shpejt
 $0.8 \wedge 0.7 = 0.7$
SHPEJTESIA E MAKINES = 0.7
2. NESE eshte Vranet **DHE** Fresket, ATEHERE jepi makines Ngadale
 $0.2 \wedge 0.4 = 0.2$
SHPEJTESIA E MAKINES = 0.2

Ne temperaturen = 23°C dhe kohen = 25% me diell kemi:

$$\text{Shpejtesia mesatare} = (2 \cdot 25 + 7 \cdot 75) / 9 = 63.8 \text{ km/h}$$

