

ZADACI ZA VJEŽBU

Zadatak 1.

Data su dva diskretna fazi skupa:

$$A = \left\{ \frac{0.1}{0} + \frac{0.4}{1} + \frac{1}{2} + \frac{0.3}{3} + \frac{0.2}{4} \right\},$$

$$B = \left\{ \frac{0.2}{0} + \frac{0.5}{1} + \frac{1}{2} + \frac{0.4}{3} + \frac{0.1}{4} \right\}.$$

Odrediti:

- a) $A \cup B$
- b) $A \cap B$
- c) $\bar{A}$
- d) $\overline{A \cup B}$
- e) $\overline{A \cap B}$

Napomena: De Morganovi zakoni važe za fazi skupove.

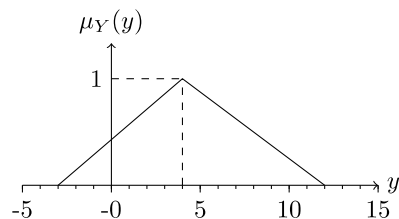
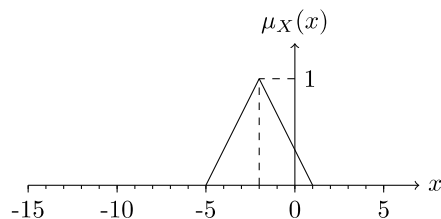
Zadatak 2.

Za fazi skupove iz zadatka 1, odrediti:

- a) $C = A + B$
- b) $C = A - B$
- c) $C = A * B$

Zadatak 3.

Na slici ispod su data dva fuzzy skupa, X i Y :



Funkcije pripadnosti su jednake:

$$\mu_X(x) = \begin{cases} \frac{x}{3} + \frac{5}{3}, & -5 \leq x \leq -2 \\ -\frac{x}{3} + \frac{1}{3}, & -2 \leq x \leq 1 \end{cases} \quad \text{i} \quad \mu_Y(y) = \begin{cases} 0 & -5 \leq y \leq -3 \\ \frac{y}{7} + \frac{3}{7}, & -3 \leq y \leq -4 \\ -\frac{y}{3} + \frac{12}{8}, & 4 \leq y \leq 12 \end{cases}$$

Odrediti:

- a) $Z = X \cup Y$
- b) $Z = X \cap Y$
- c) $Z = \overline{X}$
- d) $Z = \overline{X \cup Y}$

Skicirati funkcije pripadnosti.

Zadatak 4.

Za fazi skupove iz zadatka 3, odrediti:

- a) $Z = X + Y$,
- b) $Z = X - Y$,
- c) $Z = X * Y$,
- d) $Z = X / Y$.