

3. Zakon distribucije:

$$A \cdot (B + C) = A \cdot B + A \cdot C$$
$$A + B \cdot C = (A + B) \cdot (A + C)$$

De Morganova teorema:

$$\overline{A \cdot B} = \overline{A} + \overline{B}$$

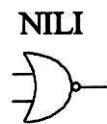
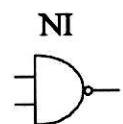
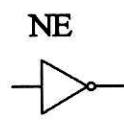
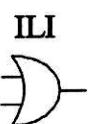
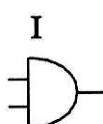
$$\overline{A + B} = \overline{A} \cdot \overline{B}$$

Uopštena De Morganova teorema:

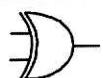
$$\overline{X_1 \cdot X_2 \cdot \dots \cdot X_n} = \overline{X_1} + \overline{X_2} + \dots + \overline{X_n}$$
$$\overline{X_1 + X_2 + \dots + X_n} = \overline{X_1} \cdot \overline{X_2} \cdot \dots \cdot \overline{X_n}$$

Logičke operacije i simboli njima odgovarajućih logičkih kola

Osnovne logičke operacije i simboli su:

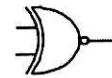


ISKLJUČIVO ILI



$$C = A \cdot \overline{B} + \overline{A} \cdot B = A \oplus B$$

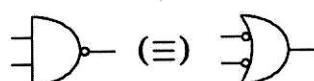
ISKLJUČIVO NILI



$$C = A \cdot B + \overline{A} \cdot \overline{B} = \overline{A \oplus B} = A \ominus B$$

Slika 2. Simboli osnovnih kombinacionih kola

Prema De Morganovim zakonima važe sledeći identiteti:



Slika 3. Identiteti na osnovu De Morganovih zakona