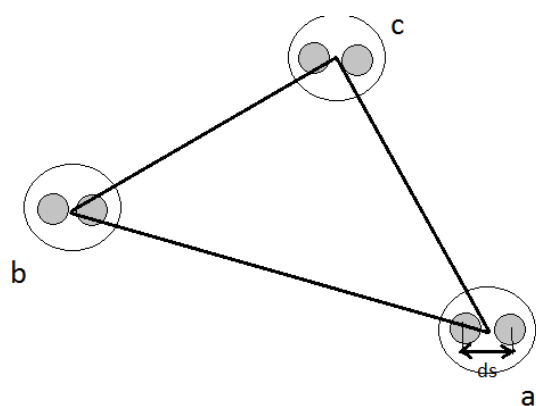


2. MI – 2010/11

1. zadatak



$$r = 14 \text{ mm}$$

$$ds = 20 \text{ cm}$$

$$D_{ab} = 13 \text{ m}$$

$$D_{ac} = 8 \text{ m}$$

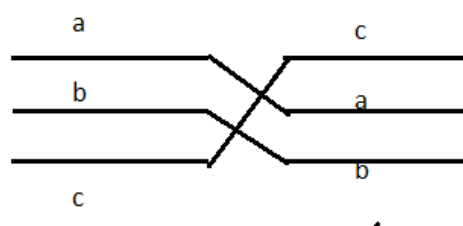
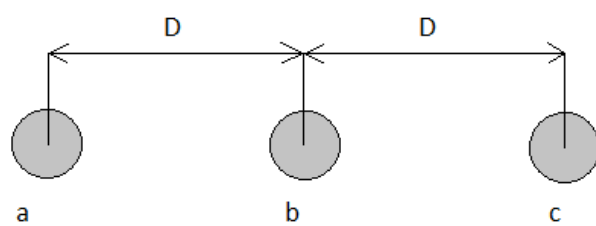
$$D_{bc} = 11 \text{ m}$$

$$f = 50 \text{ Hz}$$

a) Odrediti X_a , X_b i X_c neprepletenog voda.

b) Odrediti X_1 prepletenog voda.

2. zadatak



$$D = 15.5 \text{ m}$$

$$r = 16 \text{ mm}$$

Odredite L_a , L_b i L_c .

3. zadatak

Zadana je matrica za neprepleteni vod:

$$[B^{abc}] = \begin{bmatrix} 31.188 & -3.908 & -6.743 \\ -3.908 & 29.668 & -5.606 \\ -6.743 & -5.606 & 29.816 \end{bmatrix} \cdot 10^{-7} \left[\frac{S}{km} \right]$$

Odredi B0, B1, C0 i C1 za prepleteni vod.

4. zadatak

Zadani su sljedeći podaci (koordinate uključuju i izolatore i sve):

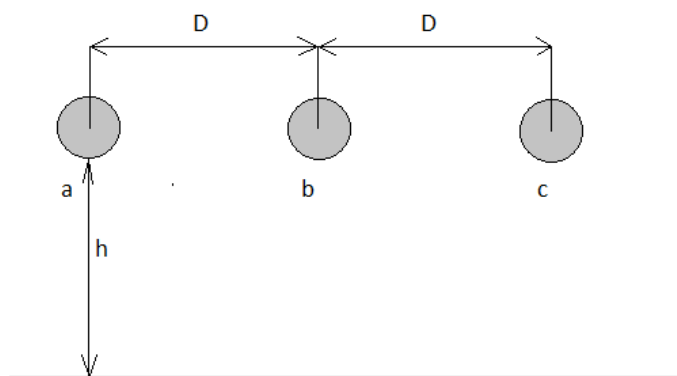
Br. vodiča	Vodič	R[ohm/km]	d[mm]	x[m]	y[m]
1	a	0.089	26	6.5	16
2	b	0.089	26	-5.5	20
3	c	0.089	26	4.5	24
4	P	1.523	12.5	0	37.3

Također je zadan i $\rho = 150$ ohm m.

Odredite za prepleteni vod matricu $[Z^{abc}]$.

5. zadatak

Zadana je slika:



$$D = 12.5 \text{ m}$$

$$h = 15 \text{ m}$$

$$r = 14 \text{ mm}$$

Odredite dozemni kapacitet C_z .