

Metoda sit - metoda rezem skv

1) skemna' ravnice: $\Delta \Delta F = 0$

$$\frac{\partial^4 F}{\partial x^4} + 2 \frac{\partial^4 F}{\partial x^2 \partial y^2} + \frac{\partial^4 F}{\partial y^4} = 0$$

2) dskemnem' nakhoda skemna' ravnice v uravni' j:

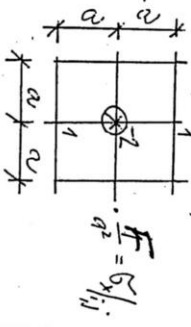
		1		
	2	-8	2	
1	-8	20	-8	1
	2	-8	2	
		1		

. F = 0

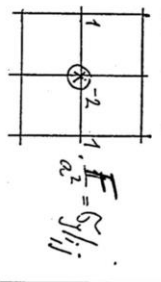
$$20 F_{i,j} - 8(F_{i-1,j} + F_{i+1,j} + F_{i,j-1} + F_{i,j+1}) + 2(F_{i-1,j-1} + F_{i-1,j+1} + F_{i+1,j-1} + F_{i+1,j+1}) + F_{i-2,j} + F_{i,j-2} = 0$$

3) isporocit naxodit pomoc' skemna' ravnice naxodit

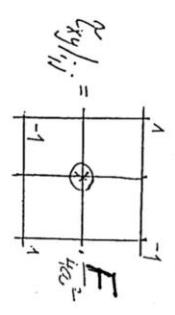
$$G_{x|i,j} = \frac{\partial^2 F}{\partial x^2 |_{i,j}} = \frac{F_{i,j+1} - 2F_{i,j} + F_{i,j-1}}{a^2}$$



$$G_{y|i,j} = \frac{\partial^2 F}{\partial y^2 |_{i,j}} = \frac{F_{i,j+1} - 2F_{i,j} + F_{i,j-1}}{a^2} = G_{x|i,j}$$



$$G_{xy|i,j} = - \frac{\partial^2 F}{\partial x \partial y |_{i,j}} = \frac{F_{i+1,j+1} + F_{i-1,j-1} - F_{i+1,j-1} - F_{i-1,j+1}}{4a^2}$$



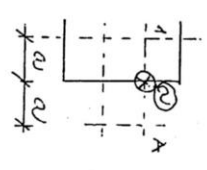
4) L'Hermiteva analogie

1) $F_a = N_{skt} \cdot a_{skt}$

2) $\frac{\partial F}{\partial a} = N_{(a)}$

$$\frac{F_a - F_1}{2a} = N_{(a)} \Rightarrow$$

$$\Rightarrow F_a = 2a \cdot N_{(a)} + F_1$$



$H > 0$ ve unimifnec' vskl'ovet