

AULA DO DIA 16/5/2019

1) $y_1 + y_2 + y_3 + y_4 + y_5 = 15 - 2N$

$2 \leq y_{1,2} \leq N+1$ $-N \leq y_3 \leq -1$

$-2 \leq y_{4,5} \leq N-3$ $N \geq 1$

$N+1+N+1+N-3+N-3 = 15-2N$

(R1) $y_{1,2} = x^2 + x^3 + \dots + x^{N+1} = x^2 (1+x+\dots+x^{N-1})$

$y_3 = x^{-N} + x^{-N+1} + \dots + x^{-1} = x^{-N} (1+x+\dots+x^{N-1})$

$y_{4,5} = x^{-2} + x^{-1} + \dots + x^{N-3} = x^{-2} (1+x+\dots+x^{N-1})$

$y_{1,2} : x^2 \frac{1-x^N}{1-x}$ $y_3 : x^{-N} \frac{1-x^N}{1-x}$ $y_{4,5} : x^{-2} \frac{1-x^N}{1-x}$

FUNÇÃO GERADORA

$$\frac{x^{-N} (1-x^N)^5}{(1-x)^5} \rightarrow \sum_0^5 x (-1)^r \binom{5}{r} x^{Nr}$$

$$\rightarrow \sum_0^8 \binom{4+S}{4} x^S$$

$-N + Nr + S = 15 - 2N$

$S = 15 - N(r+1)$

$(r, S) : (0, 15-N)$

$(1, 15-2N)$

$(2, 15-3N)$

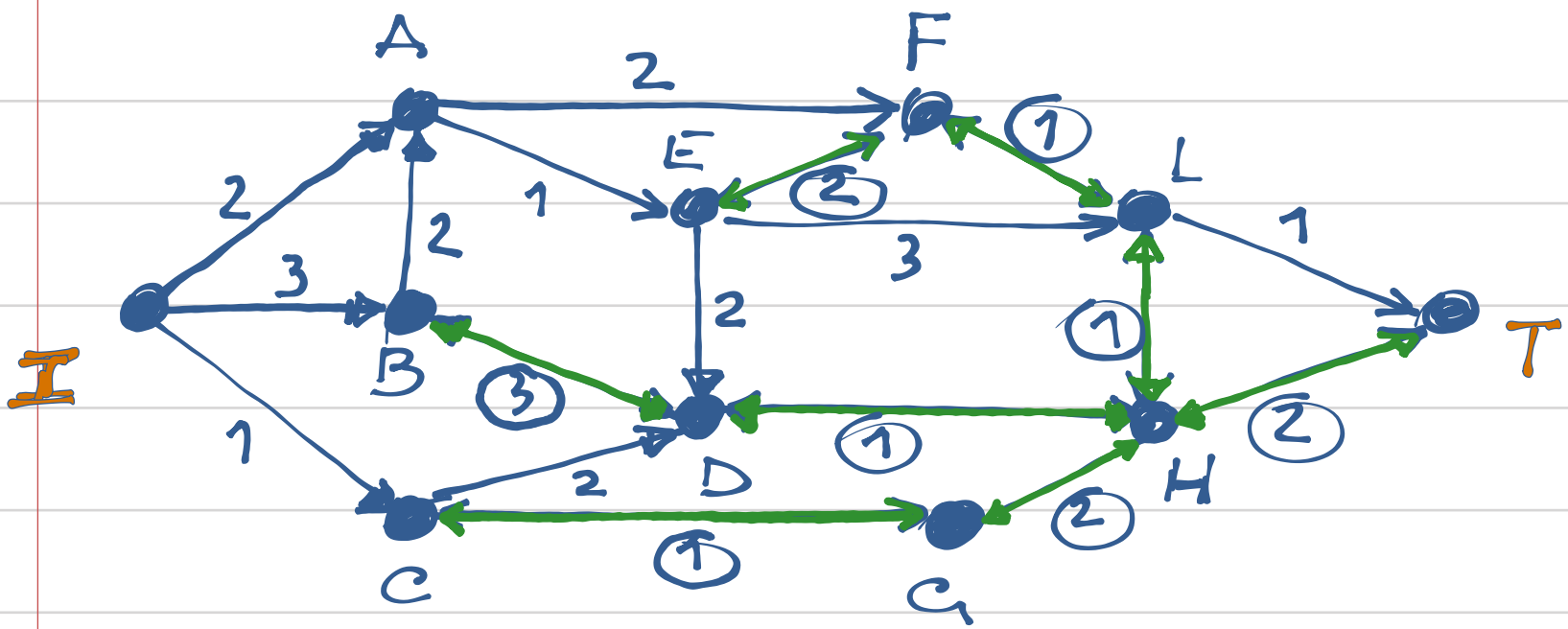
⋮

$$\binom{19-N}{4} - 5 \binom{19-2N}{4} + 10 \binom{19-3N}{4} - 10 \binom{19-4N}{4} + 5 \binom{19-5N}{4} - \binom{19-6N}{4}$$

$1 \leq N \leq 3$ "0", $N=4$ "65", $N=15$ "1"

$(2, 2, -15, -2, -2)$

2)



A	B	C	D	E	F	G	H	L	T
I ₂	I ₃	I ₁							
		X	C ₃			C ₂			
		X				X	G ₄		
X		X		A ₃	A ₄	X			
X		X	E ₅	X	E ₅	X		E ₆	
X	X	X	B ₆	X		X			
X	X	X	X	X		X	D ₄		
X	X	X	X	X	X	X		F ₅	
X	X	X	X	X	X	X	X	H ₅	H ₆
X	X	X	X	X	X	X	X	X	L ₆

TL₆ F₅ A₄ I₂ TH₆ D₄ C₃ I₁
 H₅ G₄ C₂ I₁ G₄ C₂ I₁
 D₄ C₂ I₁

- IAFLT 2+2+1+1
- ICGHLT 1+1+2+1+1
- ICDHLT 1+2+1+1+1
- ICDHT 1+2+1+2
- ICGHT 1+1+2+2

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