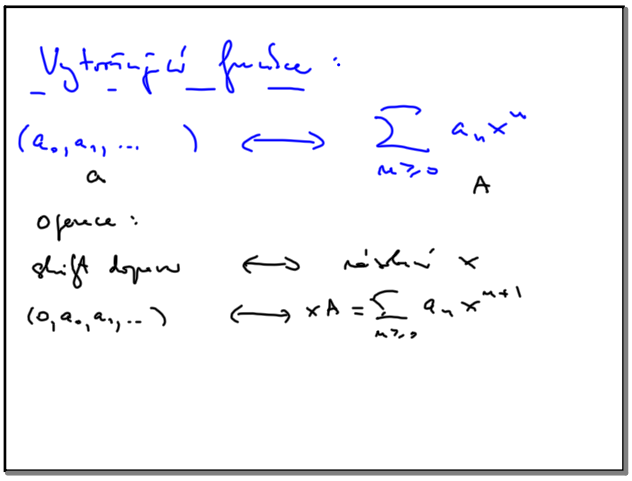
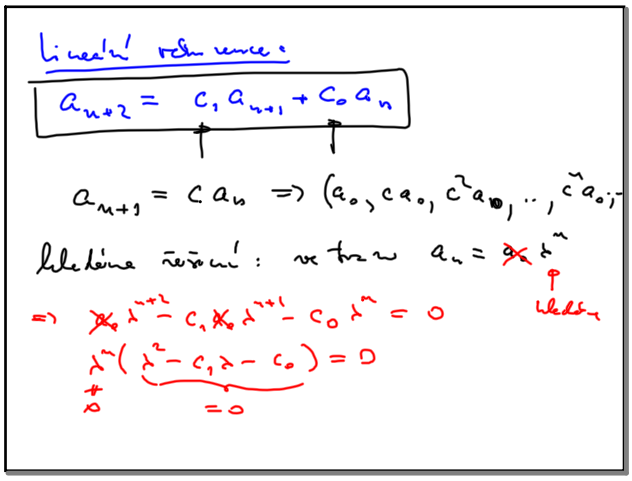


dub 23-14:05



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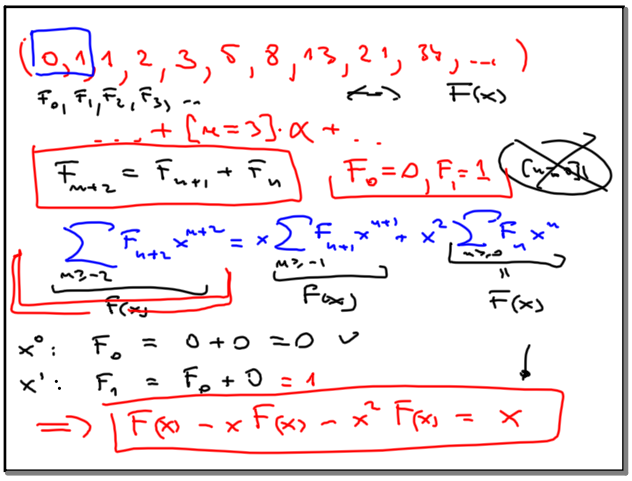

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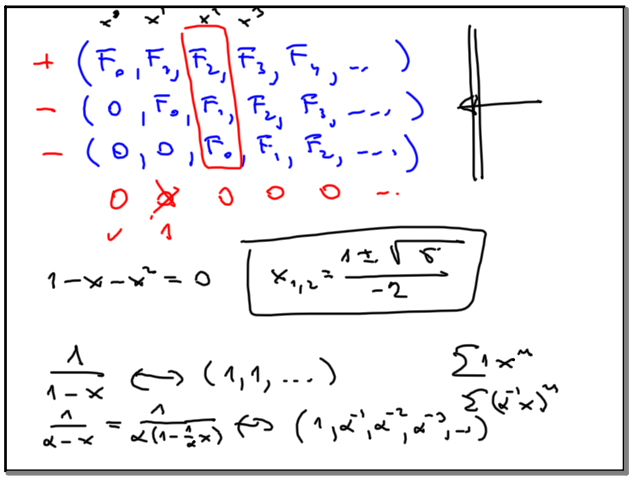

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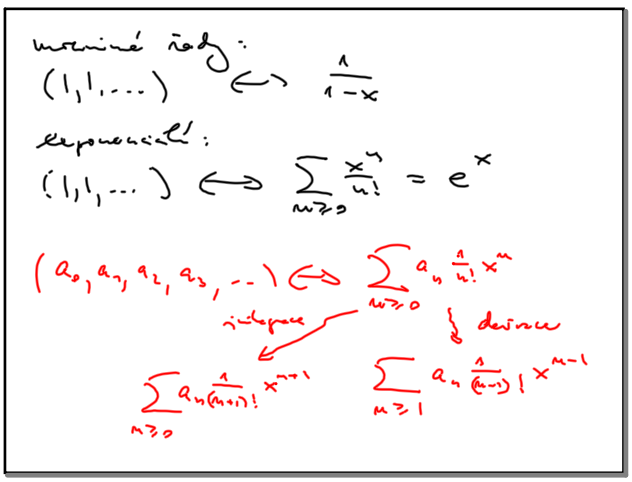
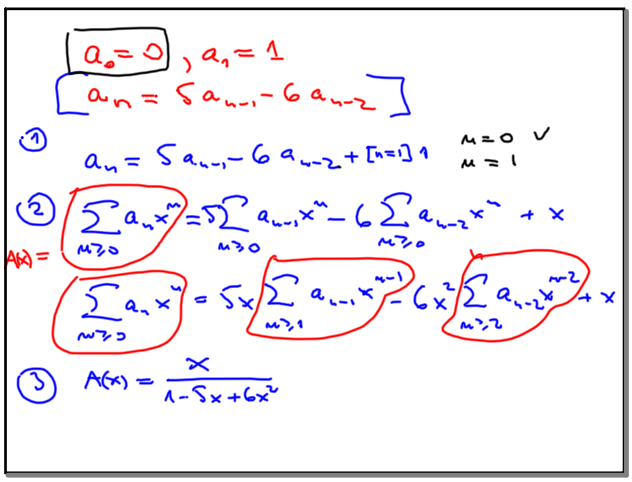


dub 23-14:53



dub 23-15:05

$\frac{x}{1-5x+6x^2} = \frac{c}{1-3x} + \frac{d}{1-2x}$

$(1-3x)(1-2x)$

$x = c(1-2x) + d(1-3x)$

$x^0: \quad 0 = c + d \quad | \quad 1 = -d$

$x^1: \quad 1 = -2c - 3d \quad | \quad 1 = c$

$a_0 = 0$

$a_1 = 1$

$a_2 = 5$

$a_3 = 19$

(4) $A(x) = \frac{1}{1-3x} - \frac{1}{1-2x}$

$\Rightarrow \boxed{a_n = 3^n - 2^n}$

dub 23-15:13

$C_n = n - 1 + \sum_{k=1}^{n} \frac{1}{n}(C_{k-1} + C_{n-k})$

$2 \cdot C_2 = 2 + 2(C_0 + C_1) = 2 \qquad C_2 = 1$

$3 \cdot C_3 = 6 + 2(C_0 + C_1 + C_2) = 8 \qquad C_3 = \frac{8}{3}$

$C(x)$ vytvořující funkce pro C_n!

$\times \; C'(x) = \sum_{n \geq 1} n C_n x^{n-1+1}$

dub 23-15:23

$\frac{1}{1-x} \sim \sum_{n \geq 0} x^n$

derivace

$\frac{1}{(1-x)^2} \sim \sum_{n \geq 1} n x^{n-1}$

derivace

$\frac{2}{(1-x)^3} \sim \sum_{n \geq 2} n(n-1) x^{n-2}$

mírně: $C' = \frac{2x}{(1-x)^3} + \frac{2}{1-x} C$

dub 23-15:33