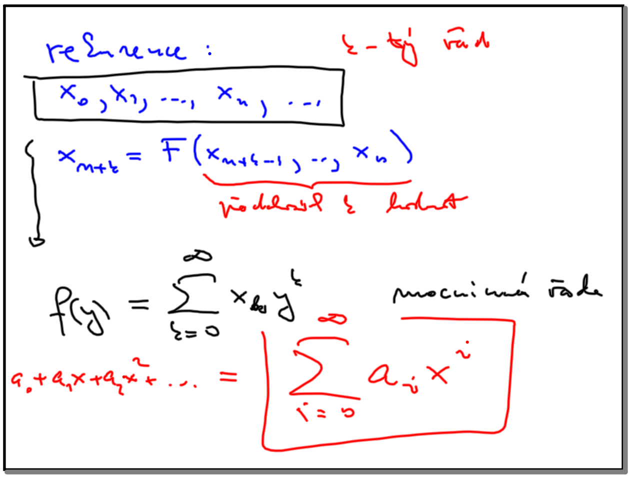
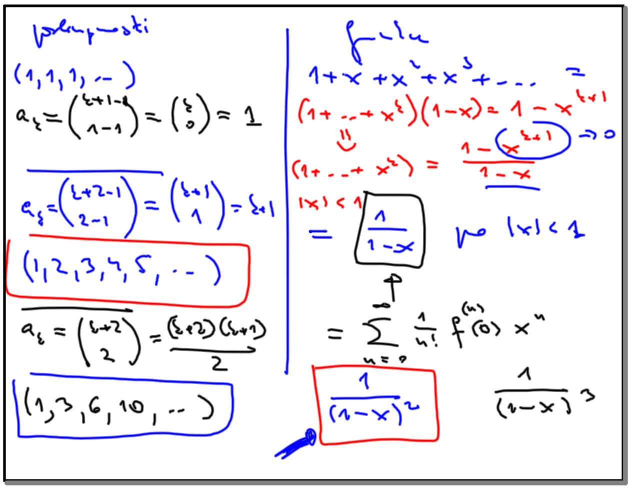
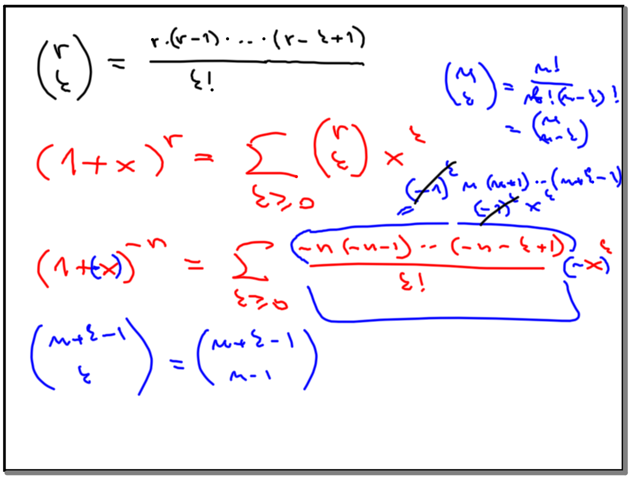


dub 16-13:59



dub 16-14:15



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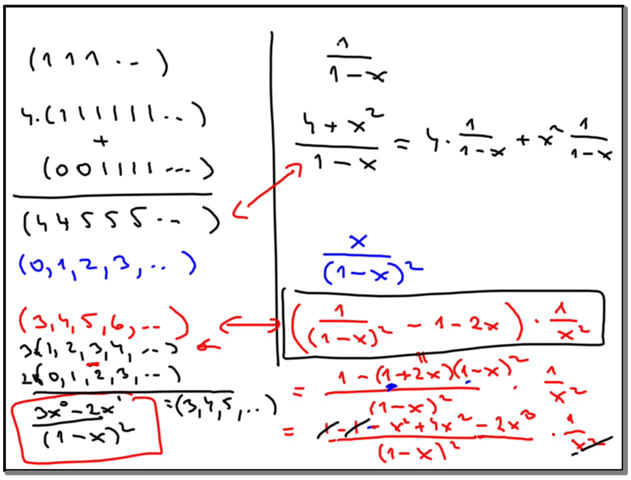

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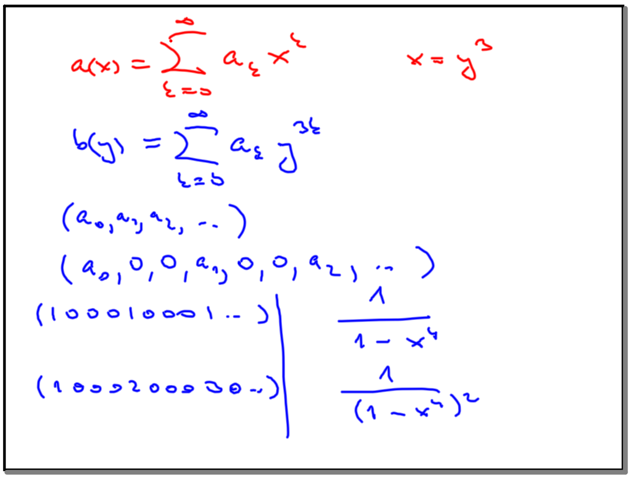
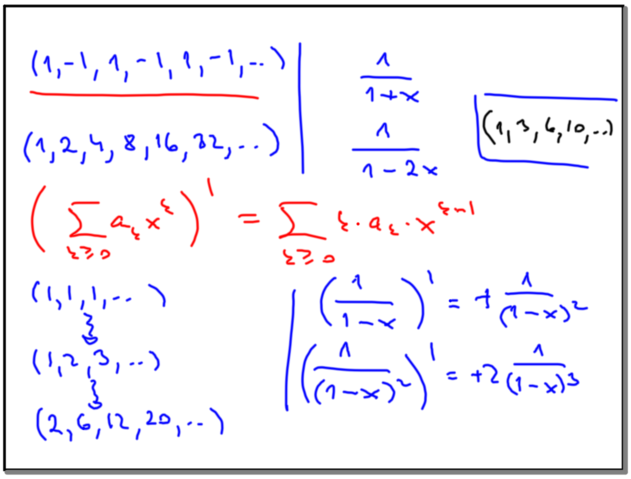


dub 16-15:02



dub 16-15:07

$$\int_0^y \sum_{k\geq 0} a_k x^k = b(y) = \sum_{k\geq 0} \frac{1}{k+1} a_k x^{k+1}$$

$$\int_0^y \frac{1}{1-x}\,dx = \left[-\ln(1-x)\right]_0^y = \ln \frac{1}{1-y}$$

$$\underset{\frac{1}{1-x}}{(1, 1, \ldots)} \rightsquigarrow \underset{\ln \frac{1}{1-x}}{\left(0, 1, \tfrac{1}{2}, \tfrac{1}{3}, \ldots\right)}$$

H_n = součet prvních n recipročních hodnot $\frac{1}{k}$

dub 16-15:17

$$\left(\sum_{k\geq 0} a_k x^k\right) \cdot \left(\sum_{l\geq 0} b_l x^l\right)$$

$$\|$$

$$\sum_{n\geq 0} \Big(\underbrace{\sum_{k+l=n} a_k \cdot b_l}_{c_n} \Big) x^n$$

$$a = (1, 1, 1, \ldots) \Rightarrow c_n = \sum_{l=0}^{n} b_l$$

dub 16-15:24

Poznámka (sumační počet)

posl. $a = (a_0, a_1, \ldots)$

diference $\Delta a = (a_1 - a_0, a_2 - a_1, \ldots, a_{k+1} - a_k, \ldots)$

částečný součet $\sigma a = (a_0, a_0 + a_1, a_0 + a_1 + a_2, \ldots)$

$$a \mapsto \Delta a \mapsto \sigma \Delta a = (a_1 - a_0, a_2 - a_0, \ldots, a_{k+1} - a_0, \ldots)$$

dub 16-15:29