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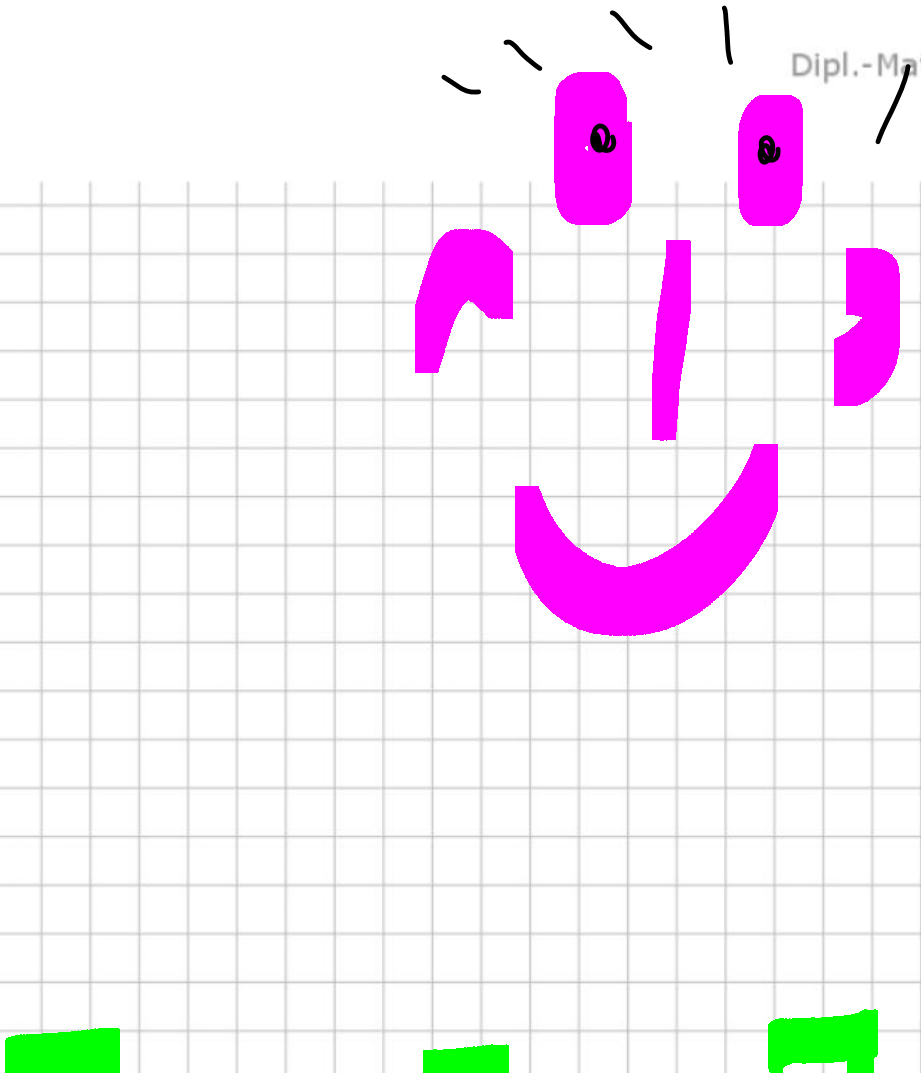

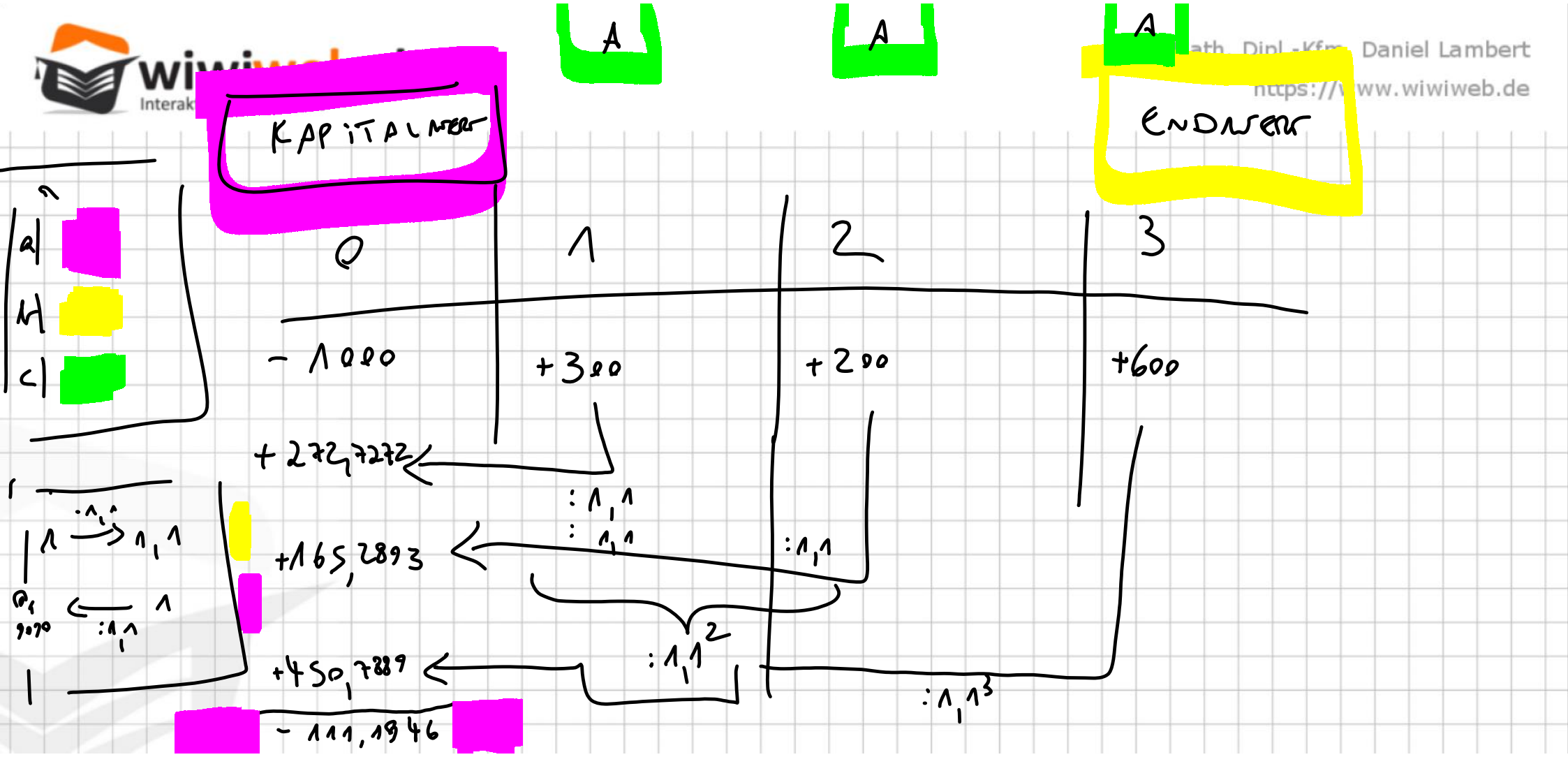

KAPITALWERT (NPV)

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$$C_0 = -A_0 + \frac{E_1 - A_1}{1+i} + \frac{E_2 - A_2}{(1+i)^2} + \ldots + \frac{E_n - A_n}{(1+i)^n}$$

$$= \sum_{t=0}^{n} \frac{E_t - A_t}{(1+i)^t}$$

$$= -A_0 + (E_1 - A_1) \cdot (1+i)^{-1} + (E_2 - A_2) \cdot (1+i)^{-2} + \ldots + (E_n - A_n) \cdot (1+i)^{-n}$$

$$= \sum_{t=0}^{n} (E_t - A_t) \cdot (1+i)^{-t}$$

$$a^{-n} = \frac{1}{a^n}$$

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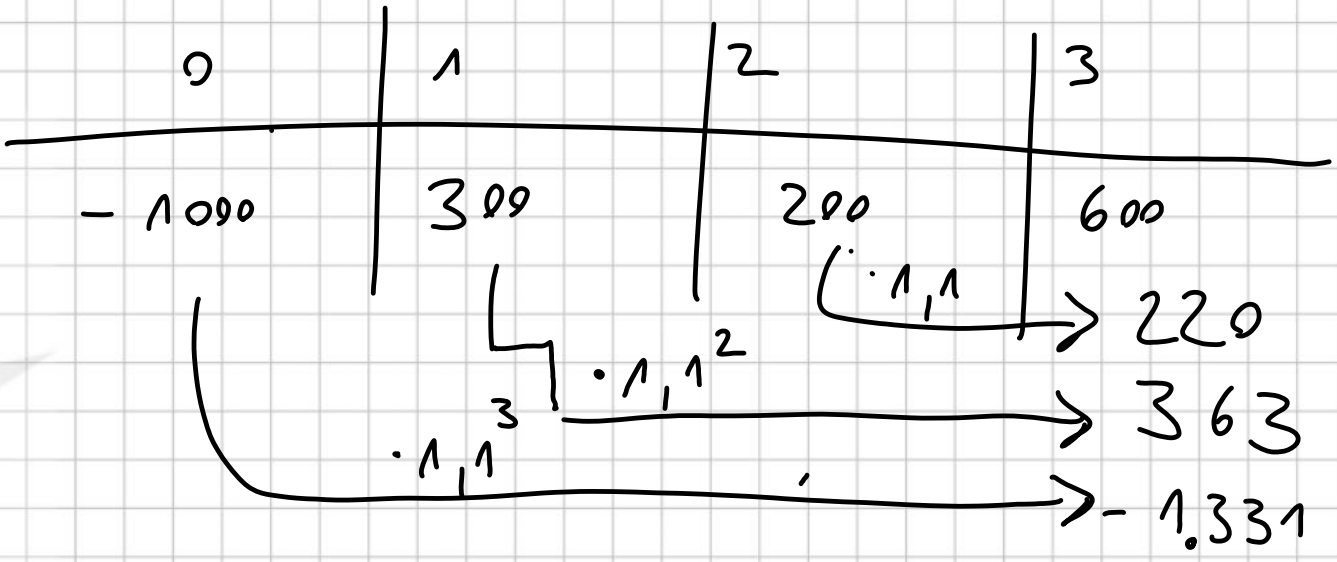
$$2^{-3} = \frac{1}{2^{+3}} = \frac{1}{8} = 0{,}125$$

b)



ENDWERT $\longrightarrow$ -148

c)

$$A = C_0 \cdot q^n \cdot \frac{i}{q^n - 1}$$

$$A = C_n \cdot \frac{i}{q^n - 1}$$

$$= -111{,}1946 \cdot (1{,}1)^3 \cdot \frac{0{,}1}{1{,}1^3 - 1}$$

$$= -111{,}1946 \cdot 0{,}402115$$

$$= -44{,}72$$

$$= -148 \cdot \frac{0{,}1}{1{,}1^3 - 1}$$

$$= -148 \cdot 0{,}302115$$

$$= -44{,}71$$

$$A = C_0 \cdot \underset{(n,i)}{NGF} = C_0 \cdot \frac{1}{RBF(n,i)}$$

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2

$i = 8\,\%$

0	1	2	3	4
	A	A	A	A

-20.000

$$A = C_n \cdot \left[\frac{i}{q^n - 1}\right] = 20.000 \cdot \frac{0{,}08}{1{,}08^4 - 1} = 20.000 \cdot 0{,}22192$$

$$= \underline{4438{,}42}$$

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