

a)

	0	1	2	3
1	-1000	300	200	600
2	+232,222			
3	+165,2893			
4	+450,7887			
5	-1111,9966€			

$\leftarrow : 1,1^1$   
 $\leftarrow : 1,1^2$   
 $\leftarrow : 1,1^3$

$\leftarrow = C_0$



	0	1
1	0	1
2	0,909090	1

$\leftarrow : 1,1^1$   
 $\leftarrow : 1,1^2$

$KAPITALWERT < 0 \Rightarrow$  invest. nicht Durchführen  
 $> 0 \Rightarrow$  " " Durchführen

$\hookrightarrow$  Endwert

0	1	2	3
-1000	+300	+200	+600
		$\cdot 1,1$	
			+220
			+363
			-1331
			-148
			= 0

$\cdot 1,1^3$  (from 0 to 3)  
 $\cdot 1,1^2$  (from 1 to 2)

"Probe"

$$C_m = C_0 \cdot \underbrace{\left( \underbrace{1+i}_{q^1} \right)^m}_{-1111, 1946} \cdot \underbrace{\left( \underbrace{1+i}_{q^1} \right)^m}_{-148}$$

c) ANPART  
A

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

$$A = -1111 \cdot 1946 \cdot 1,1^3 \cdot \frac{0,1}{1,1^3 - 1}$$

$\underbrace{\hspace{10em}}_{0,40211}$

$$= -44,7130$$

$\underline{\underline{\hspace{10em}}}$

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$$A = -1148 \cdot \frac{0,1}{1,1^3 - 1}$$

$\underbrace{\hspace{10em}}_{0,3021}$

$$= -44,7130$$

$\underline{\underline{\hspace{10em}}}$

2	0	1	2	3	4
		A	A	A	A
					-20.000

$$A = C_m \cdot \frac{i}{q^m - 1}$$

$$= 29.000 \cdot \frac{0,08}{1,08^4 - 1} = 29.990 \cdot 0,2219 = \underline{\underline{4438,4161}} \text{ €}$$

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0	1	2	3	4
	4438,14	4438,14	4438,14	4438,14
			$\cdot 1,08$	
				4793,4894
		$\cdot 1,08^2$		
				5176,19685
		$\cdot 1,08^3$		
				5591,1260
				<u>5591,1260</u>
				<u>29.000</u>