Present value X71853_en

Dessign the function *valor_presente*(I, r) that calculates the present value of an investment I represented as a list of monthly payments and a monthly interest rate r.
Example: John asks Paul to rent his vehicle for 3 months for a monthly payment of 5000 euros (the first payment is today). Once this time has passed, he will buy the vehicle for 45000 euros. John's opportunity cost is 5% monthly. ¿Which is the present value of the project?
John's investment is: $I = [5000, 5000, 5000, 45000]$. The opportunity cost is $r = 0.05$. The *valor_presente*(I, r) is

$$5000 + 5000/(1.05) + 5000/(1.05)^2 + 45000/(1.05)^3 = 53169.74408811143$$

In general, if the investment is given by $I = [I_0, I_1, \ldots, I_n]$, the present value is $I[0] + \sum_{i=1}^{n} \frac{I[i]}{(1+r)^i}$

Sample session

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>>> round(valor_presente([5000, 5000, 5000, 45000], 5), 2)
53169.74
>>> round(valor_presente([100, -50, 35], 7), 2)
83.84
>>> valor_presente([], 3)
0.0
```

Problem information

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