

1. What amount we have to save at the beginning of each month to have at the end of year on the account \$ 1000.00. The annually interest rate is 5%.
2. How much do you will have saved in 10 years if you save regularly \$ 250 at the beginning of each quarter at an interest rate of 5 % per annum?
3. What amount we need to save at the end of each month if we require in 10 years \$ 1,000,000.00. The interest rate is 5% p.a.
4. What amount will provide us with an immediate annual income of \$ 16,000.00 paid at the end of a year? The payment will continue for 20 years. Interest rate 5% p. a.
5. What is the present value of the income of \$ 6,000.00, which is paid out at the end of every quarter? The income is paid for 10 years. The annual interest rate is 5%.
6. What amount ensure for us or for our survivors a perpetual pension of \$ 5,000.00 paid out at the end of each quarter. The annual interest rate is 7%.
7. How much has the father to save for his son, who is 10 years if the son should in the age of 20 begin receiving for next 5 years a regularly monthly income of \$ 250.00. We know that the annual interest rate is 8% and remains unchanged.

[All together are 10 Extra points]

8. How much you need to save at the beginning of each quarter on your bank account for 10 years, if you want to ensure the following income. You will obtain a regular payment at the end of each month for 8 years. The income will be 515.4369. The annually interest rate for the first 10 years will be 4.1 % and then will decrease by 20 % from the previous level (4.1%). For the whole time (18 years) the interest period will be one month.

[Example No. 8 is for 8 points!]