Todd is currently age 30 and earns $50,000 per year. He would like to accumulate a fund for retirement by contributing to an account earning 6% annual effective. He will deposit X% of his annual salary at the beginning of each year for 35 years, with the first payment to be made today. Todd expects to receive 4% annual raises at the end of each year. If Todd would like to accumulate 700,000 at the end of 35 years, what is X? Round to the nearest 5 basis points.

A 7.05%
B 7.10%
C 7.20%
D 7.25%
E 7.30%

A 10-year annual annuity starts with a payment of 100 at the end of the first year and increases by 10% each year thereafter. Find the present value of this annuity at the time immediately before the first payment is made if i= 10%
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A 909
B 1100
C 900
D 1000
E 990

The present value of a 25-year annuity-immediate with a first payment of 2,500 and decreasing by 100 each year thereafter is X.

Assuming an annual effective interest rate of 10%, calculate X.

A 11,346
B 15,923
C 17,396
D 18,112
E 13,615

You are given a perpetuity, with annual payments as follows:

Payments of 1 at the end of the first year and every three years thereafter.
Payments of 2 at the end of the second year and every three years thereafter.
Payments of 3 at the end of the third year and every three years thereafter.
The interest rate is 5% convertible semi-annually.

Calculate the present value of this perpetuity.
A 24
B 29
C 34
D 39
E 47