Nikita takes out a 10-year loan. The loan is repaid by making 10 annual repayments at the end of each year. The first loan repayment is equal to $X$, with each subsequent repayment $10.16 \%$ greater than the previous year's repayment.
The annual effective interest rate being charged on the loan is $8 \%$.
The amount of interest repaid during the first year is equal to 892.20.
Calculate $X$.

A 1100
B 1150
C 1200
D 1250
E 1300
Joe negotiates a $\$ 65,000$ mortgage on a house with monthly payments of $\$ 500$ for the first year, $\$ 600$ for the second year, and $\$ 700$ until the final payment. The first payment is due one month after the loan. The annual interest rate is $12 \%$ convertible monthly. Find the outstanding balance to the nearest $\$ 500$ on Joe's mortgage immediately after the 36th payment.

A \$64,500
B \$65,500
C \$66,500
D $\$ 67,500$
E Cannot be determined
A loan of $\$ 5,000$ is repaid with equal quarterly principal repayments and interest on the outstanding balance.
The interest rate charged on the loan is an annual effective rate of $21.55 \%$.
The debt is repaid with 20 quarterly payments. The first payment is made at the end of the first quarter.
Calculate the total payment in the first year.
A 1658
B 1725
C 1808
D 1858
E 1925
A loan is being repaid in five annual payments. The first two payments are $\$ 200$. The third and fourth payments are $\$ 400$. The final payment is $\$ 500$. The annual effective interest rate is $6 \%$. Determine the interest portion of the third payment.

A Less than \$51
B At least \$51, but less than $\$ 56$
C At least \$56, but less than $\$ 61$
D At least \$61, but less than $\$ 66$
E \$66 or more

Mary Ann bought a new computer for $\$ 2,000$ and financed the entire purchase price at a nominal rate of interest payable 12 times per year at $9 \%$ per annum. She repaid her loan in 4 years with 48 equal monthly payments at the end of each month.
What was the average interest paid during a month for the first 47 months of the loan?

A 7.56
B 7.22
C 21.23
D 15.42
E 8.27

