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## Compound Interest

Use the Compound Interest Formula to calculate the compound interest word problems: NOTE: Interest Compounded Semi Annually

1. How much interest is earned on $\$ 103$ at $5 \%$ compounded semiannually for three years?
2. If the balance at the end of eight years on an investment of $\$ 903$ that has been invested at a rate of 4\% compounded semiannually is $\$ 1,239.63$, how much was the interest?
3. How much principal must be invested to earn $\$ 158.81$ in five years at an interest rate of $5 \%$ compounded semiannually?
4. You take out a loan for $\$ 501$ at an interest rate of $7 \%$ compounded semiannually for one year. What is the total amount that you will have at the end of the one year?
5. What will the final balance be for $\$ 601$ invested at $3 \%$ compounded semiannually for four years?
6. If you put $\$ 739$ into a savings account and after six years the balance is $\$ 1,327.14$, what was the interest rate if it was compounded semiannually?
7. What was the interest rate if your balance on an investment of $\$ 780$ at the end of six years is $\$ 1,112.09$ and the interest was compounded semiannually?
8. If a loan is taken out for $\$ 177$ at $5 \%$ compounded semiannually and costs $\$ 28.27$, how long was the loan for?
9. If an investment over seven years at a rate of $10 \%$ compounded semiannually results in a final balance of $\$ 1,267.16$, what was the original investment?
10. Your final balance on an investment of $\$ 414$ invested at $3 \%$ compounded semiannually was $\$ 452.69$. For what period of time did you invest?
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## Compound Interest

Use the Compound Interest Formula to calculate the compound interest word problems: NOTE: Interest Compounded Semi Annually

1. How much interest is earned on $\$ 103$ at $5 \%$ compounded semiannually for three years?
\$16.45
2. If the balance at the end of eight years on an investment of $\$ 903$ that has been invested at a rate of 4\% compounded semiannually is $\$ 1,239.63$, how much was the interest?
\$336.63
3. How much principal must be invested to earn $\$ 158.81$ in five years at an interest rate of $5 \%$ compounded semiannually?
\$567
4. You take out a loan for $\$ 501$ at an interest rate of $7 \%$ compounded semiannually for one year. What is the total amount that you will have at the end of the one year?
\$536.68
5. What will the final balance be for $\$ 601$ invested at $3 \%$ compounded semiannually for four years?
\$677.02
6. If you put $\$ 739$ into a savings account and after six years the balance is $\$ 1,327.14$, what was the interest rate if it was compounded semiannually?

10\%
7. What was the interest rate if your balance on an investment of $\$ 780$ at the end of six years is $\$ 1,112.09$ and the interest was compounded semiannually?

6\%
8. If a loan is taken out for $\$ 177$ at $5 \%$ compounded semiannually and costs $\$ 28.27$, how long was the loan for?
three years
9. If an investment over seven years at a rate of $10 \%$ compounded semiannually results in a final balance of $\$ 1,267.16$, what was the original investment?
\$640
10. Your final balance on an investment of $\$ 414$ invested at $3 \%$ compounded semiannually was $\$ 452.69$. For what period of time did you invest?
three years

