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## Compound Interest

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

1. If an investment over five years at a rate of $13 \%$ compounded semiannually results in a final balance of $\$ 3,872.53$, what was the original investment?
2. If you borrow $\$ 5,006$ for 18 years at an interest rate of $3 \%$ compounded quarterly, how much interest will you pay?
3. $\$ 17,015.15$ is earned on funds invested at a rate of $14 \%$ compounded annually over 11 years. What was the amount of the original investment?
4. What will the final balance be for $\$ 1,758$ invested at $11 \%$ compounded quarterly for seven years?
5. If a principal of $\$ 2,139$ was invested at a rate of $14 \%$ compounded quarterly and terminates with a balance of $\$ 16,851.24$, how long was the money invested for?
6. What is the interest rate if a principal of $\$ 3,219$ earns $\$ 164.69$ in interest compounded monthly in one year?
7. Your final balance on an investment of $\$ 6,782$ invested at $13 \%$ compounded monthly was $\$ 79,121.82$. For what period of time did you invest?
8. How much interest is earned on a principal of $\$ 7,924$ invested at an interest rate of $8 \%$ compounded semiannually for six years?
9. If you put $\$ 4,239$ into a savings account and after three years the balance is $\$ 5,072.73$, what was the interest rate if it was compounded monthly?
10. If a loan is taken out for $\$ 3,191$ at $3 \%$ compounded semiannually and costs $\$ 2,597.53$, how long was the loan for?
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## Compound Interest

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

1. If an investment over five years at a rate of $13 \%$ compounded semiannually results in a final balance of $\$ 3,872.53$, what was the original investment?
\$2,063
2. If you borrow $\$ 5,006$ for 18 years at an interest rate of $3 \%$ compounded quarterly, how much interest will you pay?
\$3,567.04
3. $\$ 17,015.15$ is earned on funds invested at a rate of $14 \%$ compounded annually over 11 years. What was the amount of the original investment?
\$5,274
4. What will the final balance be for $\$ 1,758$ invested at $11 \%$ compounded quarterly for seven years?

## \$3,757.60

5. If a principal of $\$ 2,139$ was invested at a rate of $14 \%$ compounded quarterly and terminates with a balance of $\$ 16,851.24$, how long was the money invested for?

15 years
6. What is the interest rate if a principal of $\$ 3,219$ earns $\$ 164.69$ in interest compounded monthly in one year?

5\%
7. Your final balance on an investment of $\$ 6,782$ invested at $13 \%$ compounded monthly was $\$ 79,121.82$. For what period of time did you invest?

19 years
8. How much interest is earned on a principal of $\$ 7,924$ invested at an interest rate of $8 \%$ compounded semiannually for six years?
\$4,762.58
9. If you put $\$ 4,239$ into a savings account and after three years the balance is $\$ 5,072.73$, what was the interest rate if it was compounded monthly?

6\%
10. If a loan is taken out for $\$ 3,191$ at $3 \%$ compounded semiannually and costs $\$ 2,597.53$, how long was the loan for?

20 years

