$\qquad$

## 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 a principal of $\$ 1,482$ was invested at a rate of $5 \%$ compounded monthly and terminates with a balance of $\$ 1,721.30$, how long was the money invested for?
2. If you borrow $\$ 210$ at $15 \%$ compounded quarterly for 18 years, how much will you pay back by the end of the term?
3. If you received $\$ 5,710.79$ on $\$ 9,386$ invested at a rate of $4 \%$ compounded semiannually, for how long did you invest the principal?
4. You put $\$ 6,576$ into an investment at $5 \%$ compounded semiannually for nine years. What will the balance be at the end of nine years?
5. How much principal must be invested to earn $\$ 7,683.05$ in 15 years at an interest rate of $5 \%$ compounded annually?
6. If an investment over eight years at a rate of $12 \%$ compounded semiannually results in a final balance of $\$ 5,347.44$, what was the original investment?
7. You invested $\$ 2,848$ and after eight years the total amount of the investment was $\$ 8,124.17$. What was the interest rate if it was compounded annually?
8. If you borrow $\$ 1,310$ at $5 \%$ compounded quarterly for nine years, how much will you pay back by the end of the term?
9. How much interest is earned on $\$ 550$ at $14 \%$ compounded semiannually for 10 years?
10. If the balance at the end of 18 years on an investment of $\$ 9,925$ that has been invested at a rate of $10 \%$ compounded monthly is $\$ 59,596.58$, how much was the interest?
$\qquad$

## 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 a principal of $\$ 1,482$ was invested at a rate of $5 \%$ compounded monthly and terminates with a balance of $\$ 1,721.30$, how long was the money invested for?
three years
2. If you borrow $\$ 210$ at $15 \%$ compounded quarterly for 18 years, how much will you pay back by the end of the term?
\$2,974.15
3. If you received $\$ 5,710.79$ on $\$ 9,386$ invested at a rate of $4 \%$ compounded semiannually, for how long did you invest the principal?

12 years
4. You put $\$ 6,576$ into an investment at $5 \%$ compounded semiannually for nine years. What will the balance be at the end of nine years?
\$10,256.32
5. How much principal must be invested to earn $\$ 7,683.05$ in 15 years at an interest rate of $5 \%$ compounded annually?
\$7,121
6. If an investment over eight years at a rate of $12 \%$ compounded semiannually results in a final balance of $\$ 5,347.44$, what was the original investment?
\$2,105
7. You invested $\$ 2,848$ and after eight years the total amount of the investment was $\$ 8,124.17$. What was the interest rate if it was compounded annually?

14\%
8. If you borrow $\$ 1,310$ at $5 \%$ compounded quarterly for nine years, how much will you pay back by the end of the term?
\$2,048.77
9. How much interest is earned on $\$ 550$ at $14 \%$ compounded semiannually for 10 years?
\$1,578.33
10. If the balance at the end of 18 years on an investment of $\$ 9,925$ that has been invested at a rate of $10 \%$ compounded monthly is $\$ 59,596.58$, how much was the interest?
\$49,671.58

