Name $\qquad$ Date $\qquad$

1. A newborn child receives a $\$ 20,000 \mathrm{gift}$ toward a college education from her grandparents. How much will the $\$ 20,000$ be worth in 17 years if it is invested at $7 \%$ and compounded quarterly?
2. If you invest $\$ 10,000$ in a bank which one is a better investment?
a) $9 \%$ compounded monthly
b) $9.3 \%$ compounded annually
3. If an investment company pays $6 \%$ compounded semiannually, how much should you deposit now to have $\$ 10,0005$ years from now?
4. At age 27, Jill deposited $\$ 4,000$ into an IRA, where it earns $9.8 \%$ interest compounded monthly. What will it be worth when she is thirty-five?
5. If you have $\$ 3,500$ after 10 years on an investment that pays $5.3 \%$ compounded daily, what was the principle amount you started with?
6. A $\$ 175,000$ loan compounded monthly at $3.2 \%$ for 19 years. How much interest was earned?
7. Your savings account has a balance of $\$ 2513.45$. You opened the account 3 years ago. Interest on the account is compounded weekly at an annual interest rate of $4.35 \%$. How much did you invest originally?
8. You deposit $\$ 1000$ in an account that pays $6 \%$ annual interest. Find how long it will take for the amount to double if the interest is compounded quarterly.
