$\qquad$
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$\qquad$

## Chapter 11, Quiz C (Lessons 11-5 and 11-6)

For Exercises 1-5, round your answers to the nearest thousandth.

1. Find the value of $\log _{4} 23.9$ using the change of base formula.
2. $\qquad$
3. Solve $5^{x+2}=87$ using common logarithms.
4. $\qquad$
5. Given that $\log 4=0.6021$, evaluate $\log 40,000$.
6. $\qquad$
7. Convert $\log _{7} 235$ to a natural logarithm and evaluate.
8. $\qquad$
9. Evaluate $\ln \frac{1}{0.45}$.
10. $\qquad$

## Chapter <br> 11 <br> NAME __ DATE <br> Chapter 11, Quiz D (Lesson 11-7)

$\qquad$ PERIOD $\qquad$

Find the amount of time required for an investment to double at the given rate if interest is compounded continuously.

1. $9.5 \%$
2. $5.0 \%$
3. Population The table shows the population for a given urban area.

| Year | 1900 | 1910 | 1920 | 1930 | 1940 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Population <br> (thousands) | 30 | 58 | 120 | 220 | 455 |

Let $x$ be the number of years since 1900 and let $y$ be the population in thousands. Linearize the data and find a regression equation for the linearized data.

1. $\qquad$
2. $\qquad$
3. $\qquad$
