Exponential and Logarithmic Functions: Worksheet

Algebra · Worksheet for https://jugami.com/algebra/logarithms/ · For instant feedback, try the self-guided quiz online.

Name _____ Date _____

Work each one on paper. Show your work; a calculator is fine where it says to round.

1. A town of 2000 people grows 4% a year. Write a model and find the population after 8 years.

Answer: _____

2. Find the amount when $800 is invested at 5% compounded monthly for 2 years.

Answer: _____

3. Write $\log_5 125 = 3$ in exponential form.

Answer: _____

4. Evaluate $\log_3(1/27)$.

Answer: _____

5. Condense $\log_3 54 - \log_3 2$ and evaluate.

Answer: _____

6. Solve $3^{x-1} = 81$.

Answer: _____

7. Solve $5 \cdot 2^x = 60$. Round to 3 decimal places.

Answer: _____

8. Solve $\log_4(x + 3) = 2$.

Answer: _____

9. Solve $\log_2 x + \log_2(x - 2) = 3$.

Answer: _____

Bonus

A little extra practice with the same skills.

10. Evaluate $\log_2 64$.

Answer: _____

11. Solve $3^x = 15$. Round to 3 decimal places.

Answer: _____

12. Solve $\log_3(x - 2) = 3$.

Answer: _____