Name: $\qquad$
Block: $\qquad$

## Chapter 8 Self-Assessment

Emerging: I am starting to understand the ideas
Developing: I am understanding many of the ideas but I make errors
Proficient: I have a complete understanding of the skills and concepts
Extending: I am pushing my learning to connect to advanced problems and ideas

| Section |  | Level of comprehension | Assignment Completed |
| :---: | :---: | :---: | :---: |
| 8.1 | - I understand that a logarithmic function is the inverse of an exponential function. <br> - I can sketch the graph of $y=\log _{c} x$ and determine characteristics of $y=\log _{c} x$ <br> - I can explain the relationship between logarithms and exponents functions <br> - I can express a logarithmic function as an exponential function and vice versa. <br> - I can evaluate logarithms without a calculator. |  |  |
| 8.2 | - I can explain how $a, b, h$, and $k$ transformation the graph of $y=\log _{c} x$ <br> - I can sketch the graph of $y=a \log _{c}(b(x-h))+k$ without a graphing calculator |  |  |
| 8.3 | - I am able to apply logarithm laws to simplify and evaluate expressions. <br> - I know how to use the Richter scale formula <br> - I know how to use the pH scale formula |  |  |
| 8.4 | - I can solve logarithmic equations. <br> - I understand why I must check my solutions and I can explain why a solution may be extraneous. <br> - I can solve exponential equations that can not be written in the same base. |  |  |

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| Word <br> problems | $\bullet$ <br> I can solve problems for real world situations using <br> - I know the growth/decay and compound interest formula <br> and how to use them to solve problems |  |  |
| :---: | :---: | :--- | :--- |
| 8.5 | • I can use log laws with the natural log |  |  |
| • I can solve problems that have $e^{x}$ or $\ln x$ |  |  |  |


| Work Habits | G <br> $100 \%$ to <br> $80 \%$ of the <br> time | S <br> $80 \%$ to $60 \%$ <br> of the time | N <br> less than <br> $60 \%$ of the <br> time |
| :--- | :---: | :---: | :---: |
| Assignments completed and handed in on time |  |  |  |
| Arrive to class on time |  |  |  |
| Return after break on time |  |  |  |
| Work on the math assignment during class |  |  |  |
| Phone use limited to checking math answer keys posted on <br> the website |  |  |  |
| If absent: <br> watching the lesson video or reading the lesson notes |  |  |  |

## Explain how you would solve each type of question

Exponential (When you cannot write both sides in the same base)

Logarithmic (When you have at least two logs in the equation)

