# Reading Quiz 04 for Calculus 3096 

Name : $\qquad$ Student ID \#: $\qquad$ Score : $\qquad$

Read chapter 4.

1. State all laws of exponents in page 230.
2. What is $e$ ?
3. Write the differential equation satisfied by $y=C e^{k t}$ in page 241.
4. State the properties that graphs of the form $y=e^{k t}$ have in common when $k$ is positive. When $k$ is negative. (pp. 241-242)
5. What is a logarithm? (page 245)
6. What is the $x$-intercept of the graph of the natural logarithm function?
7. State the main features of the graph of $y=\ln x$.
8. State the two key equations giving the relationships between $e^{x}$ and $\ln x$.
