**IB Math HL1 : Logarithmic Derivatives Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_**

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| **Warm UP:**  If  and , then rewrite each expression in terms of *a* and *b*.  1.  2. | | |  | |
| **Derivative using the properties of Logarithm**   |  | | --- | | ***Notes: The idea is to find***  *by* ***the properties of logarithm instead of the product rule and the quotient rule.***  **Example) Find**  (Differentiate with respect to x). | | | |  | | |
| Practice) **Find** . Show your work.   |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | | |  | | |
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