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

|  |  |
| --- | --- |
| Warm UP: Differentiate with respect to x: |  |

1.  2. 

|  |  |
| --- | --- |
|  |  |
| 1.
 |  4.  |
| 5. **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. |  |
|  |  |
|  |  |
|  |  |