L’Hôpital’s Rule

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| **REVIEW** | | |
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| --- | --- |
| WHAT IS… | WHAT IS… |

These are values that are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

L’Hôpital’s Rule states: If , then

Tips:

* Ask yourself: Does L’Hôpital’s Rule apply?
* DO NOT differentiate using the quotient rule!!
* If the indeterminate form appears after using L’Hôpital’s Rule once, use L’Hôpital’s Rule again!!
* WRITE LIMIT NOTATION IN EVERY STEP!!!

Examples:

1. Evaluate .

2. Evaluate .

3. Evaluate .

PART “DEUX” (Part Two)

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| **OTHER INDETERMINATE FORMS** |
|  |

Don’t believe it? Try typing and into your calculator…

What do you get for ? How about ? Math was just broken!!

Using log rules and L’Hôpital’s Rule, try the following examples:

1. Evaluate .

2. Evaluate .