

Name _____ **Answer Key** _____

Date _____

Math 2301

Derivatives Quiz

Complete this by yourself. Determine whether you should use the original function, the first derivative or the second derivative for each item listed below. If more than one answer is appropriate, list your answer and then explain your choice.

1. Intercepts - **Original**
2. Location of stationary points – **First Derivative**
3. Location of singular points – **First Derivative**
4. Location of maximums – **First Derivative**
5. Location of minimums – **First Derivative**
6. Y value of maximums - **Original**
7. Y value of minimums - **Original**
8. Location of points of inflection – **Second Derivative**
9. Y value of points of inflection - **Original**
10. To determine if a critical point is a maximum – Either first or second derivative test
11. To determine if a critical point is a minimum – Either first or second derivative test
12. Intervals of increasing – **First Derivative**
13. Intervals of decreasing – **First Derivative**
14. Intervals of concave up – **Second Derivative**
15. Intervals of concave down – **Second Derivative**