Math 250   3.1-3.6 Concepts
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1. The calculus can be used to find where a function f is increasing by finding where

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2. The calculus can be used to find where a function f is concave upward by finding where

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3. The second derivative test says that the point (c, f(c)) is a relative maximum of f(x) if

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ and _ .

4. A good place to look for inflection points is where

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5. The calculus can be used to find where a function f is decreasing by finding where

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6. The absolute maximum of a differential function on a closed interval occurs at either

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ or at _ .

7. If f''(3) = 2 you can expect f(x) to be _ _ _ _ _ _ _ _ _ _ _ _ _ at x = 3.

8. One can estimate the value of the derivative of a function from its graph because the derivative is the

_ .

9. If the derivative of f(x) is negative on the entire interval (2,4) then the function f(x) is

_ _

10. If the derivative of the continuous function f(x) changes from negative to positive at x = 3 then

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11. If the second derivative of the continuous function f(x) changes from negative to positive at x = 3 then

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