

Derivative Applications
Chapter 4
Math 102

Skim through sections 4.1 and 4.2 to review some of the applications of differentiation, and then respond to the prompts below.

1. What is a *critical point* of a function?

2. What is the *first-derivative test for local maxima and minima*?

3. What is the *second-derivative test for local maxima and minima*?

4. What is an *inflection point*?

5. How do we find the inflection points of a function?

6. How do we find global maxima and minima on a closed interval?

7. How do we find global maxima and minima on an open interval or on all real numbers?