

MATH 151 Homework 26

Due 4/24

Read Section 5.3.

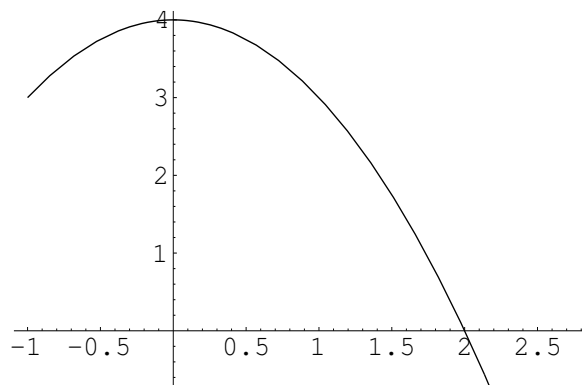
Do Section 4.7 Exercise 54

Do Section 5.2 Exercise 48

Do Section 5.3 Exercises 1, 2, 7, 11, 13

Also, do the following exercises.

SF59. Below is the graph of a function f .



Let $g(x) = \int_0^x f(t) dt$. Then for $0 < x < 2$, $g(x)$ is (explain your answer)

- (a) increasing and concave up.
- (b) Increasing and concave down.
- (c) decreasing and concave up.
- (d) decreasing and concave down.

SF60. Write an expression for a function $f(x)$ with the property that $f'(x) = \sin(x^2)$ and $f(0) = 7$.