Math 211, Section 2.2 Handout

Name:_____

Which of the following graphs (a)-(d) could represent the slope at every point of the function graphed in Figure 2.6?

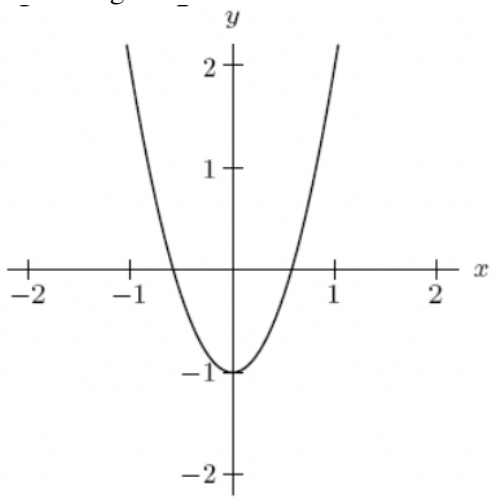
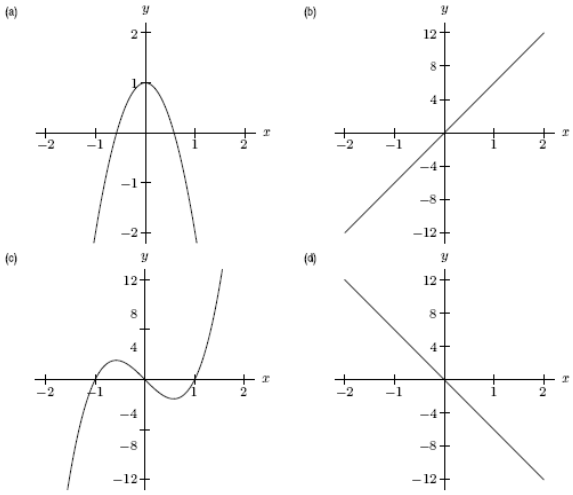


Figure 2.6



Which of the following graphs (a)-(d) could represent the slope at every point of the function graphed in Figure 2.8?

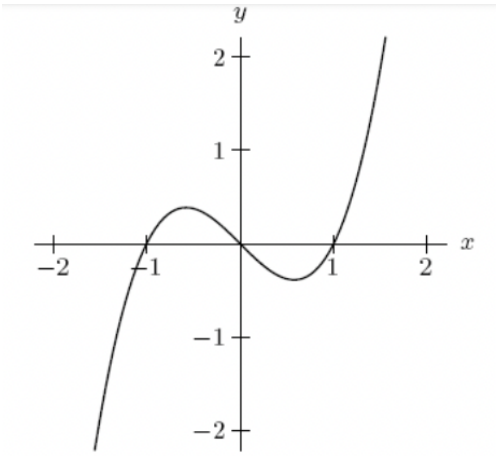
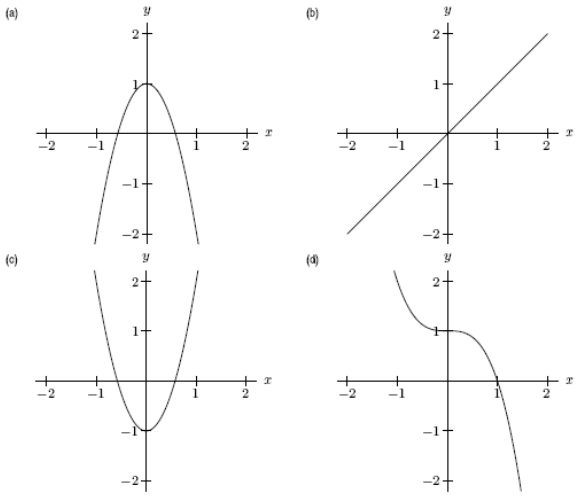


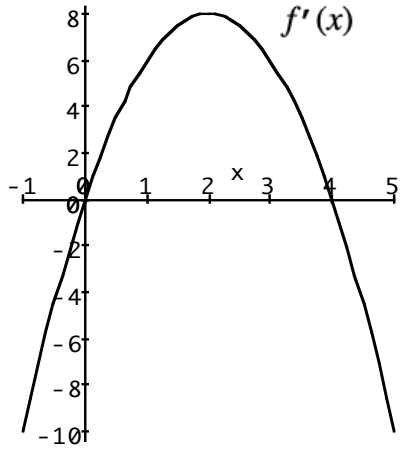
Figure 2.8



Estimating Derivatives and the Derivative Function.

Graphs of the Derivative Function

To the right is **a graph of $f'(x)$,** the derivative of $f(x)$. What does it tell you about the function $f(x)$ which you cannot see?

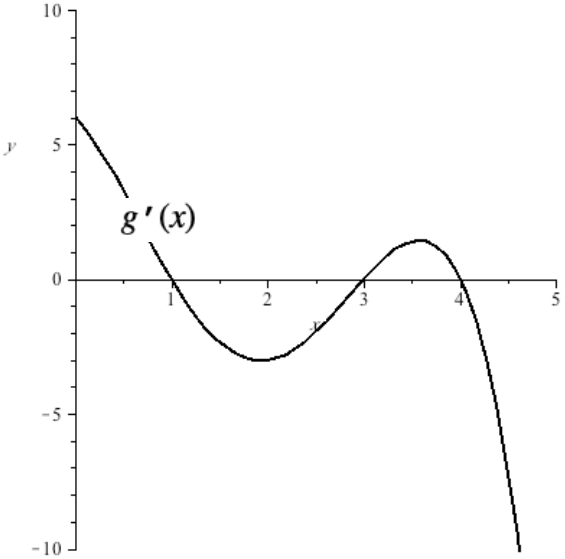


1. Where is $f(x)$ increasing?

2. Where is $f(x)$ decreasing?

3. Suppose $f(0) = 0$. Sketch a graph of $f(x)$.

To the right is a **graph of $g'(x)$**, the derivative of $g(x)$. What does it tell you about $g(x)$, which you cannot see?



1. Where is $g(x)$ increasing?

2. Where is $g(x)$ decreasing?

3. Suppose $g(0) = 0$. Sketch a graph of $g(x)$.