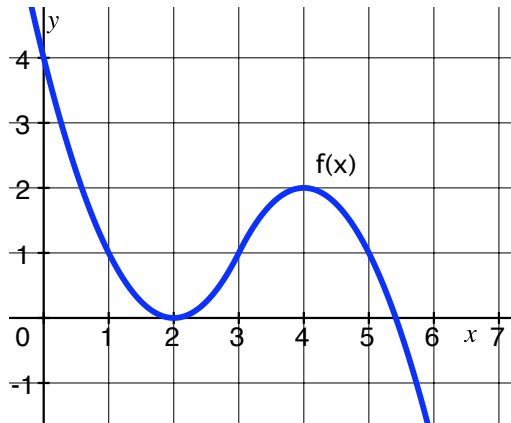


Math 111 Quiz #1  
April 6, 2010

Name: \_\_\_\_\_

Show all work on a separate sheet. Put a box around your final answer. No calculators are permitted.

1. The graph of the function  $f$  is given below.



- (a) (1 pt.) Find  $f(0)$ .
- (b) (1 pt.) Find all  $x$ -values for which  $f(x) = 1$ .
- (c) (2 pts.) Find the average rate of change from  $x = 2$  to  $x = 5$ .
- (d) (1 pt.) Where is  $f(x)$  increasing? (Give an interval or intervals.)

2. You decide to sell "I ♥ Precalculus" bracelets. You start-up costs are \$2500 and it costs you an additional \$5 to make each bracelet.

- (a) (2 pts.) Find a formula for the total cost  $C$  in terms of  $x$ , the number of bracelets made.
- (b) (1 pts.) How many bracelets can you make for \$3000?

3. (2 pts.) Find an equation of a line through the points  $(1, -2)$  and  $(-5, 1)$ .