READING GRAPHS OF FUNCTIONS

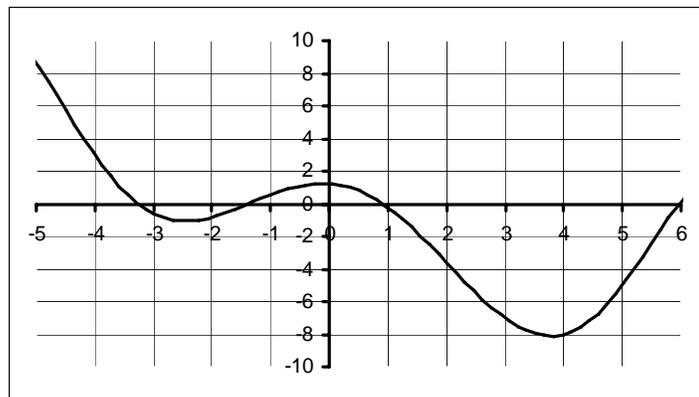1. Use the graph below to answer the following:

A. Find $f(0)$.   E. Is $f(-1/2)$ positive or negative?
B. Find $f(7)$.   F. Is $f(1) > f(6)$?
C. Find $f(2)$.   G. For what values of x is $f(x) = 0$?
D. Is $f(6)$ positive or negative?   H. For what values of x is $f(x) > 0$?
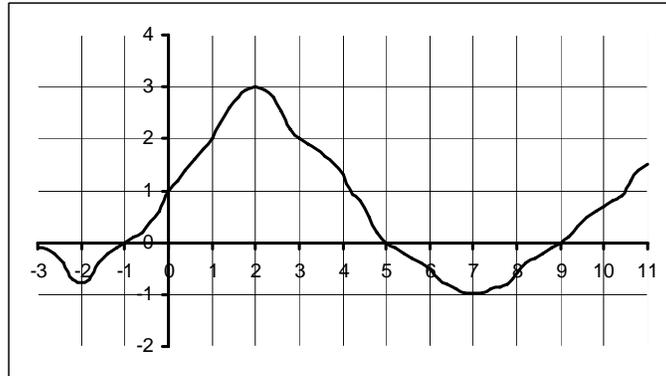
2. Use the graph below to answer the following:

A. What is $f(2)$?   E. On what intervals is $f(x)$ increasing?
B. Find x so that $f(x) = 3$.   F. For what value, if any, is $f(x) = x$?
C. Find the zeros of $f(x)$.   G. On what intervals is the rate of increase of
D. What is $f(f(2))$? $f(x)$ actually decreasing?

3. When a drug is injected into a person's muscle tissue, the concentration of the drug in the blood is a function of the time elapsed since the injection. Use the graph below to answer the following: ($t = 0$ corresponds to the time of injection)

   A. What is the concentration of the drug one hour after the injection?
   B. Find $C(3)$ and give an interpretation.
   C. Over what interval is the concentration greater than 0.01?
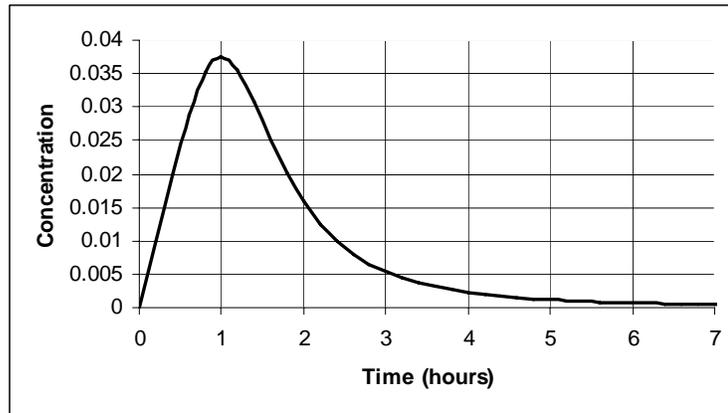
4. The graph below illustrates the temperature on a particular day as a function of time since midnight.

   A. What was the temperature at 3:00 a.m.?
   B. When was the temperature 5 degrees?
   C. When was the temperature below freezing? (less than 0 degrees)
   D. When was the temperature increasing?