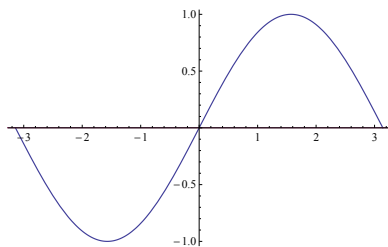


Business PreCalculus MATH 1643 Section 004, Spring 2014
Worksheet 14

1- Let $f(x)$ be given by the following graph:



a. Find the intervals of increasing of the function.

b. Find the intervals of decreasing of the function.

2- Determine whether the function is even, odd, or neither:

a. $f(x) = \frac{x}{x^5 + 3x^3}$.

b. $f(x) = 2x^4 + 4$.

c. $f(x) = 2x^3 - 3x^2$.

3- Find the average rate of change of the function $f(x) = 2 + x - x^2$ as x varies between -2 and 3 .

4- Evaluate and simplify the difference quotient of:

a. $f(x) = x^2 - x$.

b. $f(x) = 3x - 2x^2$.