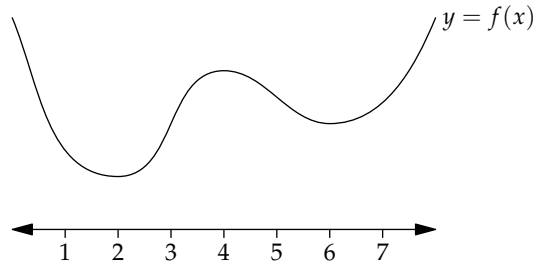


LAS Calculus

Graphs

Homework 7

1. Let f be the function in the following graph.



Where is f increasing? Where is f decreasing?

2. Let $f(x) = 2x^2 - 4x + 3$.
- (a) Is f increasing or decreasing at $x = 0$?
 - (b) Is f increasing or decreasing at $x = 3$?
 - (c) Is f concave up or concave down at $x = 0$?
 - (d) Is f concave up or concave down at $x = 3$?
3. Let $f(x) = 2x^3 - 5x^2 + 2x + 1$.
- (a) Is f increasing or decreasing at $x = 0$?
 - (b) Is f increasing or decreasing at $x = 1$?
 - (c) Is f concave up or concave down at $x = 0$?
 - (d) Is f concave up or concave down at $x = 1$?