LAS Calculus
Graphs
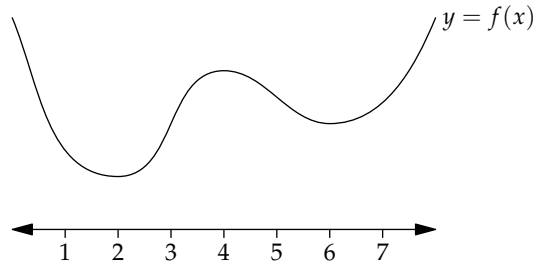### Homework 8

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

$y = f(x)$

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 $x = 1$?