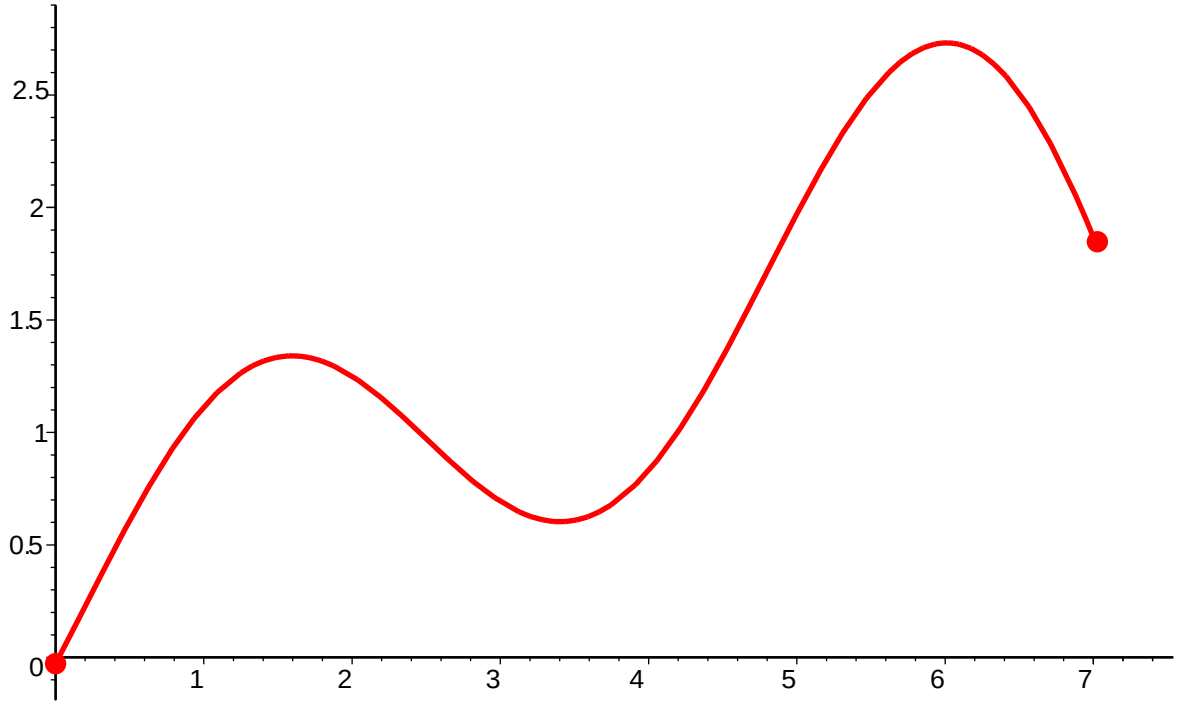
Newberger, Calculus 122, Fall 2005

Worksheet: Reading a graph



The graph of $f(x)$

(1) What are the domain and range of f? Put your answers on the table below.
(2) What is $f(2)$?
(3) Compare your answers to (1) and (2) with the person next to you.
(4) Fill out this table for f. If your answer is a range of numbers, use interval notation.

Property	x values
Domain	
Range	
$f(x) = 1$	
$f(x)$ is zero	
$f(x)$ is positive	
$f(x)$ is negative	
$f(x)$ is not increasing or decreasing	
$f(x)$ is increasing	
$f(x)$ is decreasing	
local maxima of $f(x)$	
local minima of $f(x)$	

(5) The number $f(x)$ is the height of a bird in flight (in hundreds of feet) after x minutes of flight. On the back of this sheet, explain what each of the entries in the table means in terms of the bird's flight. Make sure what you write makes sense for the bird. Write neatly.
(6) I made the values on this graph so that they didn't line up well with the tick-marks. What does this tell you about using graphs to give precise information about a function?