

Worksheet for HW 8

Use the Golden Section Search Method to locate the maximum of the function

$f(x) = -x^6 - 2x^4 - 3x^1 + 1$

between $x = -1$ and $x = 0.5$. There is only one such maximum. Do this by filling out the following table up to the number of rows indicated, either by hand or electronically by downloading the L^AT_EX template.

Step	a	$x_1 = b - Rh$	$x_2 = a + Rh$	b	h	next
0		$x =$ $f =$	$x =$ $f =$			
1		$x =$ $f =$	$x =$ $f =$			
2		$x =$ $f =$	$x =$ $f =$			
3		$x =$ $f =$	$x =$ $f =$			
4		$x =$ $f =$	$x =$ $f =$			
5		$x =$ $f =$	$x =$ $f =$			
6		$x =$ $f =$	$x =$ $f =$			