

**ENGINEER 1D04**  
**Engineering Computation**  
**McMaster University, Winter 2010**

**Lab 7 Marked Assignment 3 Solution**  
**Tuesday Lab**

Revised: 5 March 2010

**Correctness**

Interval	Result
$[1, 3]$	"Definitely Crosses the X-Axis"
$[-1, 1]$	"Likely does not Cross the X-Axis"

**Design Question**

The function could cross the x-axis between two successive sample points.

**Testing Question**

There are 2 such points:  $x = -2$  and  $x = 2$ . Closed intervals that would be suitable for these points are  $[-3, -1]$  and  $[1, 3]$ , respectively.

Note: The student should receive 1 mark if he or she says there are 2 points and 2 marks if he or she gives two closed intervals that include  $x = -2$  and  $x = 2$ , respectively.