Math 124 Winter 2009
Assignment #1

This assignment is due at the beginning of class on Thursday, January 15, 2009. Late assignments will not be accepted. You must submit solutions to all problems marked with an asterix (*), answering them using complete sentences.

YOUR ASSIGNMENT MUST BE STAPLED AND PROBLEM NUMBERS CLEARLY LABELLED. UNSTAPLED ASSIGNMENTS WILL NOT BE ACCEPTED! DO NOT CROWD YOUR WORK. DO NOT WRITE IN MULTIPLE COLUMNS.

1. * How did you find out about this class? (poster, email, word-of-mouth, etc.)

2. Section 1.1, pages 32–38, #1, #3, #5, #6, #7, #9, #11, #13, #15, #17, #19, #21, #22

3. * Section 1.1, pages 32–39, #2, #4, #8, #10, #12, #14, #16, #18, #20, #23

4. Section 1.2, pages 46–47, #1, #2, #3, #5, #6

5. * Section 1.2, page 47, #4

6. * (similar to #1 on page 46) The table

x	A	B	C	D	E	F	G	H	I	J	K	L	M
$f(x)$	I	L	O	V	E	R	C	K	Y	A	D	W	N

x	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
$f(x)$	B	F	G	H	J	M	P	Q	S	T	U	X	Z

defines a function f.

(a) Evaluate $f(\text{A})$ and $f(\text{V})$.

(b) For which values of x is $f(x) = x$?

(c) Explain why f is one-to-one and find a table for its inverse.

(d) Find the table for $f \circ f$.