

*"I like maxims that don't encourage behavior modification."* BILL WATTERSON

In class work 10 has questions 1 through 3 with a total of 14 points. This assignment is due at the end of the class period (9:55 AM). This assignment is printed on **both** sides of the paper.

1. Given that  $f(x) = 2x + 3$  and  $g(x) = 1 - x$ , find the *numerical value* of each of the following

2 (a)  $f \circ g(4)$

2 (b)  $g \circ f(4)$

2 (c)  $g \circ g(0)$

2 2. Given that  $f(x) = 2x + 3$  and  $g(x) = 1 - x$ , find a formula for  $f \circ g$ .

3. A table of values for functions  $f$  and  $g$  are

$x$	$f(x)$
0	3
1	2
2	1
3	0

$x$	$g(x)$
0	1
1	3
2	2
3	0

Find the *numerical values* of

2

(a)  $f \circ g(1)$

2

(b)  $g \circ f(1)$

2

(c) Using only the values from the table, find the solution to the equation  $g \circ g(x) = 2$ .