

## Composition of Functions Worksheet

Name \_\_\_\_\_

I. Let  $f(x) = 2x - 1$ ,  $g(x) = 3x$ , and  $h(x) = x^2 + 1$ . Compute the following:

1.  $f(g(-3))$

2.  $f(h(7))$

3.  $g(h(24))$

4.  $h(f(9))$

5.  $g(f(0))$

6.  $h(g(-4))$

7.  $f(g(h(2)))$

8.  $h(g(f(5)))$

9.  $g(f(h(-6)))$

II. Let  $f(x) = 9 - x$ ,  $g(x) = x^2 + x$ , and  $h(x) = x - 2$ . Compute the following:

10.  $g(f(3))$

11.  $f(g(4))$

12.  $h(f(-6))$

13.  $f(h(-3))$

14.  $h(g(11))$

15.  $g(h(-9))$

16.  $g(h(f(5)))$

17.  $h(g(f(13)))$

18.  $f(g(h(-8)))$