Composition of Functions Worksheet

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

1. $f(g(x))$
2. $f(h(x))$
3. $g(h(x))$

4. $h(f(x))$
5. $g(f(x))$
6. $h(g(x))$

7. $f(f(x))$
8. $h(h(x))$
9. $g(g(x))$

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

10. $g(f(x))$
11. $f(g(x))$
12. $h(f(x))$

13. $f(h(x))$
14. $h(g(x))$
15. $g(h(x))$

16. $g(g(x))$
17. $h(h(x))$
18. $f(f(x))$

Composition of Functions Worksheet 2

I. $f(x) = 2x - 1$ $g(x) = 3x$ $h(x) = x^2 + 1$ 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(f(2))
8. h(h(5))
9. g(g(-6))

II. $f(x) = 9 - x$ $g(x) = x^2 + x$ $h(x) = x - 2$ 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(g(5))
17. h(h(13))
18. f(f(-8))