

## COMPOSITE FUNCTION Worksheet

Evaluate each composite value

1. If  $f(x) = 3x - 5$  and  $g(x) = x^2$ , find  $(f \circ g)(3)$

2. If  $f(x) = -9x - 9$  and  $g(x) = \sqrt{x-9}$ , find  $(f \circ g)(10)$

3. If  $f(x) = -4x + 2$  and  $g(x) = \sqrt{x-8}$ , find  $(f \circ g)(12)$

4. If  $f(x) = -3x + 4$  and  $g(x) = x^2$ , find  $(g \circ f)(-2)$

5. If  $f(x) = -2x + 1$  and  $g(x) = \sqrt{x^2 - 5}$ , find  $(g \circ f)(2)$

For each find  $(f+g)(x)$ ;  $(f-g)(x)$ ;  $(fg)(x)$ ;  $(f/g)(x)$

6. Given  $f(x) = -9x + 3$  and  $g(x) = x^4$ ,

7. Given  $f(x) = 2x - 5$  and  $g(x) = x + 2$ ,

8. Given  $f(x) = x^2 + 7$  and  $g(x) = x - 3$ ,

9.

Given  $f(x) = x - 1$  and  $g(x) = x^2 + 2x - 8$ ,