

Functions 5a – Composition of Functions
Homework #3

Name _____
Per _____ Date _____

Compute the following composite functions, simplifying when possible.

1. $f(x) = 3x - 1$

$g(x) = x^2 - 2x + 1$

$f(g(x)) =$

2. $f(x) = x^2 - 2x + 1$

$g(x) = 3x - 1$

$f(g(x)) =$

3. $f(x) = \frac{2}{x}$

$g(x) = \frac{1}{x}$

$f(g(x)) =$

4. $f(x) = 2x + 1$

$g(x) = \frac{1}{2}x - \frac{1}{2}$

$(f \circ g)(x) =$

5. $f(x) = 3x - 1$

$g(x) = x^2$

$(f \circ g)(x) =$

$(g \circ f)(x) =$

6. $f(x) = 2x + 1$

$g(x) = \frac{1}{2}x^2$

$f(g(x)) =$

$g(f(x)) =$

7. $f(x) = 2x$

$$g(x) = x^2$$

$$f(g(x)) =$$

$$g(f(x)) =$$

8. $f(x) = 2x - 5$

$$g(x) = \sqrt{x}$$

$$h(x) = \frac{1}{x}$$

$$g(f(x)) =$$

$$h(f(x)) =$$

$$h(g(x)) =$$