

Name: _____

Date: _____

Composite Function

Using $f(x) = 5x + 4$ and $g(x) = x - 3$, find

1. $f(g(6))$ **19**
2. $g(f(-7))$ **-34**
3. $f(f(8))$ **224**
4. $g(f(x))$ **$5x+1$**

Using $f(x) = 8x^2$ and $g(x) = 2x + 8$ find:

5. $(f \circ g)(x)$ **$32x^2 + 256x + 512$**
6. $(f \circ g)(x)$ **$32x^2 + 256x + 512$**

7. Are these two answers the same? What does this information tell you about composition?

$(f \circ g)(x)$ And $(f \circ g)(x)$ are two different composition and their values could be same.

The notation $[x]$ means the greatest integer not exceeding the value of x . Given $f(x) = [x]$, $g(x) = 15x$ and $h(x) = 8/x$ find:

8. $(f \circ g)(6)$ **90**
9. $(f \circ h)(4)$ **2**
10. $(h \circ f)(4)$ **2**