

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Period: \_\_\_\_\_

Ugly Derivatives,  
One More Try ☺Suppose that  $f$  and  $g$  and their first derivatives have the following values at  $x = -1$  and  $x = 0$ .

$x$	$f(x)$	$g(x)$	$f'(x)$	$g'(x)$
-1	0	-1	2	1
0	-1	-3	-2	4

Evaluate the derivatives with respect to  $x$  of the following combinations at the given value of  $x$ .

a)  $3f(x) - g^2(x)$  at  $x = 0$

b)  $(f(x)g(x))^2$  at  $x = 0$

c)  $g(f(x))$  at  $x = -1$

d)  $f(g(x) + 2)$  at  $x = 0$

e)  $\frac{f(x) + 1}{g(x) - 2}$  at  $x = -1$

f)  $g(2x - 2g(x))$  at  $x = -1$