

Name Key

Date _____ Pd _____

5.5b Operations with Functions DAY TWO CYU

 Use when you get it right all by yourself**S** Use when you did it all by yourself, but made a silly mistake**H** Use when you could do it alone with a little help from teacher or peer**G** Use when you completed the problem in a group**X** Use when a question was attempted but wrong (get help)**N** Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Composition of Functions		1 - 7	
Evaluating Functions	1 - 7		
Domain of functions			1 - 7

Perform the indicated composition of functions. Restrict the domain. Finally evaluate for the value given.

1. $g(n) = -4n - 4$

$h(n) = n^2 + 5 + n$

Find $(g \circ h)(n)$

$(g \circ h)(3) = -72$

$-4n^2 - 4n - 24$

$D: (-\infty, \infty)$

2. $h(n) = n^2 - 5$

$g(n) = -4n + 5$

Find $(h \circ g)(n)$

$(h \circ g)(-2) = 164$

$11n^2 - 40n + 20$

$D: (-\infty, \infty)$

3. $g(a) = 3a - 4$

Find $(g \circ g)(a)$

$(g \circ g)(0) = -16$

$9a - 16$

$D: (-\infty, \infty)$

4. $h(n) = 2n + 2$
 $g(n) = 2n$
 Find $(h \circ g)(n)$

$(h \circ g)(-1) = -2$

$4n + 2$

$D: (-\infty, \infty)$

5. $f(n) = -4n + 1$
 $g(n) = -2n - 5$
 Find $(f \circ g)(n)$

$(f \circ g)(3) = 45$

$8n + 21$

$D: (-\infty, \infty)$

6. $h(a) = 2a + 3$
 $g(a) = a^2 + 2a$
 Find $(h \circ g)(a)$

$(h \circ g)(1) = 9$

$2a^2 + 4a + 3$

$D: (-\infty, \infty)$

7. $f(t) = 2t + 5$
 $g(t) = t^3 - 2t^2$
 Find $(f \circ g)(t)$

$(f \circ g)(0) = 5$

$2t^3 - 4t^2 + 5$

$D: (-\infty, \infty)$

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself

