Math-2A

Name_____

SM2-A HW #11-3 (Composition of Functions)

Evaluate each function.

1) $h(n) = n^2 - 2$; Find $h(-10)$

2) $k(a) = |a + 2|$; Find $k(0)$

3) $g(x) = x - 4$; Find $g(3 - x)$

4) $g(x) = 3x - 5$; Find $g(x + 2)$

5) $h(a) = 3a - 1$; Find $h(3 - a)$

6) $p(x) = 4x + 5$; Find $p(x - 2)$

7) For the following two functions, find f(g(x))
   f(x) = 2x − 2
   g(x) = x − 2

8) For the following two functions, find f(g(x))
   f(x) = x + 3
   g(x) = x² − 1

Perform the indicated operation.

9) $g(x) = x^2 - 5x$
   $h(x) = 4x - 4$
   Find $(g \circ h)(x)$

10) $f(x) = x - 3$
    Find $(f \circ f)(x)$

11) $h(n) = n - 4$
    $g(n) = n^2 - 2n$
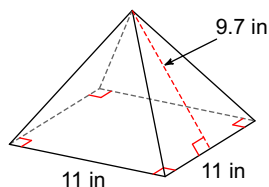   Find $(h \circ g)(-9)$

12) $g(a) = a - 2$
    $h(a) = -2a^2 - 1$
    Find $(g \circ h)(2)$

Find the surface area of each figure. Round your answers to the nearest hundredth, if necessary.

13)

9.7 in

11 in   11 in

14)

2 mi

1 mi