Math-3A Name_____ ID: 1

SM3-A HW #6-5 (Review)

Date_____ Period____

Evaluate each function.

1) $k(a) = a^2 + 2$; Find $k(7)$

2) $p(x) = 3|x + 2|$; Find $p(10)$

Perform the indicated operation.

3) $g(n) = 3n - 1$
$f(n) = 4n - 2$
Find $(g \circ f)(n)$

4) $g(x) = x + 3$
$h(x) = x^3 - 5x^2$
Find $(g \circ h)(x)$

5) $g(t) = 4t + 1$
$f(t) = 3t + 2$
Find $(g \circ f)(8)$

6) $g(a) = 2a - 4$
Find $(g \circ g)(-1)$

7) $g(n) = -2n - 5$
$h(n) = -n - 2$
Find $(g \circ h)(-8)$

8) $g(x) = 2x$
$h(x) = 4x - 1$
Find $(g + h)(x)$

9) $f(x) = -3x + 2$
$g(x) = x^2 + 2$
Find $(f + g)(-7)$

10) $g(n) = 3n + 2$
$h(n) = n - 2$
Find $(g \cdot h)(-1)$

11) $f(x) = 4x - 5$
$g(x) = x^3 + 3x^2$
Find $\left(\frac{f}{g}\right)(x)$

12) $h(x) = 4x + 4$
$g(x) = 3x^2 - 3$
Find $\left(\frac{h}{g}\right)(9)$

13) $g(x) = 3x + 4$
$h(x) = x^2 - 2$
Find $(-2g + 2h)(x)$

14) $f(x) = 3x - 2$
$g(x) = x^3 + 1$
Find $(5f + 4g)(-1)$

Find the inverse of each function.

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

16) $f(x) = \sqrt[3]{x + 1} + 2$

17) $g(x) = \frac{3}{7}x + \frac{12}{7}$

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

19) $g(x) = -\frac{3}{x - 1} - 1$

20) $g(x) = -\frac{4x}{5}$