Algebra 2 Name_____

Composition 1

Perform the indicated operation.

1) $g(n) = 3n + 4$
$h(n) = 2n + 4$
Find $g(-7) - h(-7)$

2) $g(n) = 4n - 5$
$h(n) = 4n - 1$
Find $g(3) - h(3)$

3) $f(n) = n^2 + 2$
$g(n) = n + 1$
Find $f(4) \cdot g(4)$

4) $h(n) = 2n + 2$
$g(n) = -4n - 2$
Find $h(-9) \div g(-9)$

5) $g(x) = 3x + 1$
$h(x) = -2x^2 + 4$
Find $g(3) \cdot h(3)$

6) $h(n) = 2n - 1$
$g(n) = n^2 - 1$
Find $h(10) + g(10)$

7) $g(x) = 2x + 2$
$h(x) = x^2 + 3$
Find $\left(\frac{g}{h}\right)(5)$

8) $g(x) = 2x - 2$
$h(x) = 2x^2 + 3x$
Find $(g - h)(-6)$

9) $f(a) = -4a + 1$
$g(a) = a^2 - a$
Find $(f - g)(5)$

10) $f(a) = a + 2$
$g(a) = 2a + 5$
Find $(f + g)(-5)$

11) $g(x) = -2x + 1$
$h(x) = 2x - 3$
Find $\left(\frac{g}{h}\right)(6)$

12) $h(n) = 3n + 2$
$g(n) = 2n + 4$
Find $(h + g)(-4)$

13) $h(a) = 4a - 5$
$g(a) = a^3 - 3a$
Find $h(g(0))$

14) $h(x) = 3x + 4$
Find $h(h(-1))$

15) $g(t) = t^3 - 2t$
$h(t) = 3t + 5$
Find $g(h(-2))$

16) $g(n) = -n + 5$
$h(n) = 2n + 4$
Find $g(h(-3))$

17) $g(x) = -2x$
Find $(g \circ g)(-10)$

18) $g(a) = a + 1$
$h(a) = -a^2 - a$
Find $(g \circ h)(4)$

19) $f(a) = 4a + 1$
$g(a) = 4a - 1$
Find $(f \circ g)(3)$

20) $g(n) = 4n - 5$
Find $(g \circ g)(3)$

