Algebra 2 Name_____

Composition of Functions

Perform the indicated operation.

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

2) $f(n) = 3n + 4$
$g(n) = -n^3 - n$
Find $f(g(2))$

3) $g(x) = -2x + 4$
$h(x) = x^2 - 4$
Find $g(h(0))$

4) $f(n) = n^2 + 3n$
$g(n) = 2n$
Find $f(g(0))$

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

6) $g(t) = -4t - 5$
$h(t) = 2t + 1$
Find $g(h(-6))$

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

8) $g(n) = -3n - 4$
$h(n) = 3n - 2$
Find $g(h(-8))$

9) $g(t) = t^2 - t$
$h(t) = t + 2$
Find $g(h(t))$

10) $f(a) = 2a + 1$
$g(a) = a^2 - 2 - a$
Find $f(g(a))$

11) $g(a) = a^3 + 4a$
$h(a) = -4a + 3$
Find $g(h(a))$

12) $f(x) = 4x - 4$
$g(x) = x - 4$
Find $f(g(x))$

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

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

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

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

17) $h(n) = n^2 + 2$
$g(n) = -3n + 3$
Find $h(g(n))$

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

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

20) $g(n) = n^2 - 1$
$h(n) = 2n + 5$
Find $g(h(n))$

21) $f(n) = n^2 - 2n$
$g(n) = n - 2$
Find $f(g(n))$

22) $f(n) = 4n + 4$
$g(n) = n - 3$
Find $f(g(n))$

23) $g(x) = 3x + 4$
$f(x) = -3x + 3$
Find $g(f(x))$

24) $g(x) = 3x$
$h(x) = x^2 + x$
Find $g(h(x))$