Algebra 2 Name_____

Composition 2

Perform the indicated operation.

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

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

3) $g(n) = 2n - 2$
$f(n) = 3n - 2$
Find $g(n) - f(n)$

4) $g(a) = a + 2$
$h(a) = 4a - 2$
Find $\left(\frac{g}{h}\right)(a)$

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

6) $h(x) = x - 4$
$g(x) = x + 5$
Find $(h - g)(x)$

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

8) $g(x) = 2x - 5$
$h(x) = 3x - 1$
Find $g(h(x))$

9) $h(t) = 4t - 3$
$g(t) = t + 1$
Find $h(g(t))$

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

11) $g(t) = t^2 - 2t$
$h(t) = 3t - 2$
Find $(g \circ h)(t)$

12) $f(t) = 3t + 3$
$g(t) = 2t + 5$
Find $(f \circ g)(t)$

13) $f(a) = -a - 3$
$g(a) = a^2 - a$
Find $(f \circ g)(a)$

14) $h(x) = x^2 + 4x$
$g(x) = 4x + 2$
Find $(h \circ g)(x)$