Algebra 2 Name_____

2.8 Operations with Functions Practice

Date_____ Period____

Perform the indicated operation.

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

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

3) $f(t) = t^2 - 3t$
$g(t) = 4t + 5$
Find $f(2) + g(2)$

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

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

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

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

8) $g(t) = 2t - 5$
$h(t) = 4t + 2$
Find $g(-10) - h(-10)$

9) $h(x) = 2x^2 + 3$
$g(x) = 3x - 3$
Find $h(x) \cdot g(x)$

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

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

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

13) $f(x) = x^2 + 3$
$g(x) = 4x + 2$
Find $f(x) \div g(x)$

14) $f(n) = -4n + 4$
$g(n) = n^2 + 2$
Find $f(n) \div g(n)$

15) $g(n) = n^2 + 2 - n$
$h(n) = 4n - 4$
Find $g(-8) \div h(-8)$

16) $g(x) = x^2 + x$
$h(x) = 2x + 2$
Find $g(-5) \div h(-5)$

17) $g(x) = -x + 2$
$f(x) = -2x + 5$
Find $g(f(x))$

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

19) $g(n) = n^2 + 2$
$h(n) = -n - 5$
Find $g(h(7))$

20) $g(x) = 4x + 1$
$f(x) = 3x + 5$
Find $g(f(-6))$