Math 2 Name_____

Unit 9.5 Multiply and Divide Operations with Functions PRACTICE

Period____

Perform the indicated operation.

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

2) $g(t) = t^2 - 3$
$f(t) = 3t - 5$
Find $(g \cdot f)(t)$

3) $f(n) = n^3 - 4n$
$g(n) = 3n - 5$
Find $(f \cdot g)(n)$

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

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

6) $f(x) = x^2 - 2$
$g(x) = -x + 1$
Find $f(x) \cdot g(x)$

7) $g(x) = x^2 + 3$
$f(x) = -3x - 5$
Find $g(x) \div f(x)$

8) $h(x) = 3x$
$g(x) = 4x + 1$
Find $(h \cdot g)(x)$

9) $f(x) = x - 4$
$g(x) = x + 5$
Find $f(0) \cdot g(0)$

10) $g(x) = 2x + 1$
$h(x) = x + 3$
Find $(g \cdot h)(4)$

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

12) $f(n) = 4n - 5$
$g(n) = -3n^3 + 2$
Find $f(0) \div g(0)$

13) $f(x) = -4x + 3$
$g(x) = x^3 - 4x$
Find $f(5) \div g(5)$

14) $f(n) = 3n - 5$
$g(n) = -n$
Find $(f \cdot g)(3)$

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

16) $g(n) = 4n + 3$
$h(n) = n^2 - 3 - n$
Find $\left(\frac{g}{h}\right)(1)$

17) $f(x) = x^2 - 3$
$g(x) = -2x - 1$
Find $\left(\frac{f}{g}\right)(4x)$

18) $g(n) = n - 2$
$h(n) = n^2 - 2$
Find $g(4x) \div h(4x)$

19) $g(n) = 4n - 2$
$h(n) = 3n - 4$
Find $\left(\frac{g}{h}\right)\left(\frac{n}{4}\right)$

20) $g(n) = 3n + 1$
$f(n) = 4n + 3$
Find $(g \cdot f)(n - 3)$

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

22) $f(x) = 4x$
$g(x) = 3x + 1$
Find $f\left(\frac{x}{2}\right) \div g\left(\frac{x}{2}\right)$

23) $f(t) = 3t - 4$
$g(t) = 2t - 1$
Find $f\left(\frac{t}{3}\right) \cdot g\left(\frac{t}{3}\right)$

24) $g(x) = 4x + 5$
$h(x) = x^3 + 5x$
Find $\left(\frac{g}{h}\right)(2x)$