

Math 4  
1-2 Practice 2

Kuta Software - Infinite Algebra 2

Name \_\_\_\_\_

Function Operations

Date \_\_\_\_\_ Period \_\_\_\_\_

Perform the indicated operation.

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

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

3)  $h(x) = 3x + 3$   
 $g(x) = -4x + 1$   
Find  $(h + g)(10)$

4)  $g(a) = 3a + 2$   
 $f(a) = 2a - 4$   
Find  $\left(\frac{g}{f}\right)(3)$

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

6)  $g(a) = 2a - 1$   
 $h(a) = 3a - 3$   
Find  $(g \cdot h)(-4)$

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

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

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

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

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

12)  $h(t) = 2t + 1$   
 $g(t) = 2t + 2$   
Find  $(h - g)(t)$

13)  $f(x) = 2x^3 - 5x^2$   
 $g(x) = 2x - 1$   
Find  $(f \cdot g)(x)$

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

15)  $g(a) = -3a^2 - a$   
 $h(a) = -2a - 4$   
Find  $\left(\frac{g}{h}\right)(a)$

16)  $f(n) = 2n$   
 $g(n) = -n - 4$   
Find  $(f \circ g)(n)$

17)  $h(a) = 3a$   
 $g(a) = -a^3 - 3$   
Find  $\left(\frac{h}{g}\right)(a)$

18)  $g(n) = 2n + 3$   
 $h(n) = n - 1$   
Find  $(g \circ h)(n)$

19)  $h(x) = x^2 - 2$   
 $g(x) = 4x + 1$   
Find  $(h \circ g)(x)$

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

21)  $g(x) = 2x - 2$   
 $f(x) = x^2 + 3x$   
Find  $(g \circ f)(-2 + x)$

22)  $g(a) = 2a + 2$   
 $h(a) = -2a - 5$   
Find  $(g \circ h)(-4 + a)$