

## Unit 1: Algebra II Review – Section 6 WS

Date \_\_\_\_\_ Block \_\_\_\_\_

**Perform the indicated operation.**

1)  $g(x) = 2x - 1$   
 $h(x) = -2x^3 + 4$   
 Find  $(g + h)(x)$

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

3)  $h(t) = t^3 - 5$   
 $g(t) = 3t - 1$   
 Find  $(h - g)(t)$

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

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

6)  $h(x) = 4x + 1$   
 $g(x) = 2x - 4$   
 Find  $h(x) \cdot g(x)$

7)  $f(x) = -4x - 4$   
 $g(x) = 3x$   
 Find  $\left(\frac{f}{g}\right)(x)$

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

**Evaluate the indicated function for the given value.**

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

10)  $g(a) = 4a + 3$   
 $h(a) = -a + 5$   
 Find  $g(-9) + h(-9)$

11)  $g(x) = x - 2$   
 $h(x) = x - 5$   
 Find  $(g - h)(-7)$

12)  $g(n) = 4n - 5$   
 $f(n) = 4n - 3$   
 Find  $g(-6) - f(-6)$

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

14)  $f(a) = a + 1$   
 $g(a) = a^3 - 5$   
 Find  $f(-2) \cdot g(-2)$

15)  $g(t) = t^2 + 3$   
 $f(t) = t + 4$   
 Find  $\left(\frac{g}{f}\right)(0)$

16)  $f(x) = 3x - 3$   
 $g(x) = -x^3 + 4x$   
 Find  $f(-6) \div g(-6)$

**Perform the indicated operation.**

17)  $h(x) = 4x - 1$   
 $g(x) = -2x^3 - 1$   
 Find  $(h \circ g)(x)$

18)  $g(x) = 3x + 2$   
 $h(x) = x^2 + x$   
 Find  $(g \circ h)(x)$

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

20)  $f(n) = 4n - 4$   
 $g(n) = 4n + 4$   
 Find  $f(g(n))$

**Evaluate the indicated function for the given value.**

21)  $g(x) = 4x - 5$   
 $h(x) = x - 2$   
 Find  $(g \circ h)(9)$

22)  $g(n) = 4n - 1$   
 $f(n) = n + 2$   
 Find  $(g \circ f)(-8)$

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

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

**Perform the indicated operation.**

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

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

**Evaluate the indicated function for the given value.**

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

28)  $h(t) = t + 1$   
 $g(t) = 3t + 4$   
 Find  $2h(-1) + 3g(-1)$