Function operations Name_____

Date_____

Perform the indicated operation.

1) $f(a) = 4a + 3$
$g(a) = a - 5$
Find $(f + g)(8)$

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

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

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

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

6) $g(t) = 2t - 3$
$f(t) = 4t + 2$
Find $g(-2) \cdot f(-2)$

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

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

9) $g(x) = 2x - 1$
$f(x) = -3x - 5$
Find $(g - f)(-4)$

10) $f(a) = a + 1$
$g(a) = 3a + 4$
Find $f(g(-4))$

11) $g(x) = 2x - 5$
$f(x) = x^2 - 2$
Find $(g + f)(-7)$

12) $h(x) = 2x + 1$
$g(x) = -x^3 + 5x^2$
Find $h(7) + g(7)$

13) $h(n) = -2n^2 + 4$
$g(n) = 3n$
Find $\left(\frac{h}{g}\right)(-7)$

14) $h(x) = x - 3$
$g(x) = x + 3$
Find $h(6) - g(6)$

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

16) $f(a) = 4a - 5$
$g(a) = 4a + 5$
Find $f(7) + g(7)$

Answers to

1) 38
2) 9
3) 0
4) $-\frac{1}{4}$
5) 96
6) 42
7) −22
8) 15
9) −16
10) −7
11) 28
12) −83
13) $\frac{94}{21}$
14) −6
15) −60
16) 56