

Operations of Functions

Date _____ Period _____

Perform the indicated operation.

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

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

3) $f(n) = n^2 + 5$
 $g(n) = 4n + 1$
Find $f(n) + g(n)$

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

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

6) $f(a) = -4a - 5$
 $g(a) = a + 4$
Find $f(a) \cdot g(a)$

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

8) $g(x) = 4x - 2$
 $h(x) = x - 4$
Find $g(x) \cdot h(x)$

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

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

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

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

13) $g(n) = n - 1$
 $f(n) = n - 5$
Find $g(n) \div f(n)$

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

15) $f(n) = n^3 - 5$
 $g(n) = 2n + 1$
Find $f(n) \div g(n)$