Function operations Name_____

Date_____

Perform the indicated operation.

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

2) $h(n) = 2n - 1$
$g(n) = -4n - 2$
Find $h(-10) + g(-10)$

3) $g(t) = t^3 - 3t^2$
$h(t) = 4t - 1$
Find $(g - h)(0)$

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

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

6) $h(x) = -3x + 2$
Find $h(h(10))$

7) $f(n) = -2n + 2$
$g(n) = 2n + 1$
Find $f(5) \cdot g(5)$

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

9) $g(t) = 3t - 3$
$h(t) = t^2 - 5$
Find $g(h(-1))$

10) $h(x) = x^2 - 5x$
$g(x) = 4x$
Find $(h \circ g)(1)$

11) $h(n) = n^3 + 1 + n$
$g(n) = n + 1$
Find $h(-1) + g(-1)$

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

13) $g(x) = x - 1$
$h(x) = 2x - 1$
Find $g(h(1))$

14) $f(x) = x + 1$
Find $(f \circ f)(5)$

15) $f(t) = 2t + 5$
$g(t) = t^2 - 3$
Find $(f + g)(10)$

16) $g(n) = 4n - 1$
Find $(g \circ g)(1)$

Answers to

1) $-\frac{3}{13}$	2) 17	3) 1	4) $\frac{33}{7}$
5) 136	6) 86	7) −88	8) 3
9) −15	10) −4	11) −1	12) −2
13) 0	14) 7	15) 122	16) 11