

4th Period - Function Operations

April 6, 2020

Perform the indicated operation.

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

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

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

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

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

6) $g(n) = n + 2$
 $h(n) = n^2 - 2 + 2n$
Find $\left(\frac{g}{h}\right)(n)$

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

8) $h(x) = -3x + 4$
 $g(x) = x^3 - 4x^2$
Find $(h \cdot g)(x)$

9) $f(n) = 4n + 1$
 $g(n) = n^2 + 5n$
Find $(f \circ g)(n)$

10) $g(x) = 2x^2 + 3x$
 $h(x) = 4x - 4$
Find $(g \circ h)(x)$

11) $f(t) = t^2 + 5t$
Find $(f \circ f)(t)$

12) $f(x) = x + 1$
 $g(x) = x - 5$
Find $(f \circ g)(x)$

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

14) $h(n) = 3n - 1$
 $g(n) = n^3 - 5n^2$
Find $(-5h + 2g)(n)$

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