Advanced Algebra Honors Name_____

Function Operations

Date_____ Period____

Perform the indicated operation.

1) $h(x) = 4x - 5$
$g(x) = 2x + 1$
Find $h(-4) \cdot g(-4)$

2) $g(a) = -2a - 4$
$h(a) = a^2 - 3a$
Find $g(-1) \cdot h(-1)$

3) $f(n) = -n^3 - 5n^2$
$g(n) = 3n - 1$
Find $\left(\frac{f}{g}\right)(-2)$

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

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

6) $h(t) = t^2 + t$
$g(t) = 4t - 5$
Find $\left(\frac{h}{g}\right)(6)$

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

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

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

10) $f(x) = -3x - 5$
$g(x) = x^2 + 2$
Find $f(1) - g(1)$

11) $h(n) = n^2 - n$
$g(n) = n + 4$
Find $(h \cdot g)(n)$

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

13) $f(n) = 2n + 5$
$g(n) = 3n - 4$
Find $(f - g)(n)$

14) $f(x) = 2x - 5$
$g(x) = 2x^2 + 3$
Find $f(x) \div g(x)$

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

16) $f(n) = 4n$
$g(n) = n^2 - n$
Find $f(n) - g(n)$

17) $g(t) = 3t - 1$
$f(t) = 3t + 4$
Find $g(t) \cdot f(t)$

18) $g(n) = 2n + 3$
$h(n) = 3n + 5$
Find $(g + h)(n)$

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

20) $g(n) = 3n + 4$
$f(n) = -4n - 1$
Find $\left(\frac{g}{f}\right)(n)$

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1) $h(x) = 4x - 5$
$g(x) = 2x + 1$
Find $h(-4) \cdot g(-4)$

147

2) $g(a) = -2a - 4$
$h(a) = a^2 - 3a$
Find $g(-1) \cdot h(-1)$

−8

3) $f(n) = -n^3 - 5n^2$
$g(n) = 3n - 1$
Find $\left(\frac{f}{g}\right)(-2)$

$\frac{12}{7}$

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

20

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

−14

6) $h(t) = t^2 + t$
$g(t) = 4t - 5$
Find $\left(\frac{h}{g}\right)(6)$

$\frac{42}{19}$

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

11

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

−51

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

−4

10) $f(x) = -3x - 5$
$g(x) = x^2 + 2$
Find $f(1) - g(1)$

−11

11) $h(n) = n^2 - n$
$g(n) = n + 4$
Find $(h \cdot g)(n)$

$n^3 + 3n^2 - 4n$

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

$\frac{2x - 4}{x^2 + 3}$

13) $f(n) = 2n + 5$
$g(n) = 3n - 4$
Find $(f - g)(n)$

$-n + 9$

14) $f(x) = 2x - 5$
$g(x) = 2x^2 + 3$
Find $f(x) \div g(x)$

$\frac{2x - 5}{2x^2 + 3}$

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

$-n - 5$

16) $f(n) = 4n$
$g(n) = n^2 - n$
Find $f(n) - g(n)$

$-n^2 + 5n$

17) $g(t) = 3t - 1$
$f(t) = 3t + 4$
Find $g(t) \cdot f(t)$

$9t^2 + 9t - 4$

18) $g(n) = 2n + 3$
$h(n) = 3n + 5$
Find $(g + h)(n)$

$5n + 8$

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

$2n^3 + 3n - 4$

20) $g(n) = 3n + 4$
$f(n) = -4n - 1$
Find $\left(\frac{g}{f}\right)(n)$

$\frac{3n + 4}{-4n - 1}$