

Assignment

Date _____ Period _____

Perform the indicated operation.

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

2) $g(n) = 3n^3 + 5 - n$
 $h(n) = n - 4$
 Find $(g \cdot h)(n)$

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

4) $f(n) = 3n + 4$
 $g(n) = 2n + 5$
 Find $(f \cdot g)(n)$

5) $h(x) = -4x - 3$
 $g(x) = 3x + 3$
 Find $(h \cdot g)(x)$

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

7) $h(t) = t^3 - t$
 $g(t) = t - 5$
 Find $(h + g)(t)$

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

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

10) $g(t) = 4t - 2$
 $h(t) = t^2 - t$
 Find $(g + h)(t)$

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

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

13) $f(n) = 2n - 5$
 $g(n) = n^2 - 5n$
 Find $(f - g)(n)$

Divide.

14) $(4v^3 + 4v^2 + 24v) \div 8v^3$

15) $(12a^3 + 4a^2 + 4a) \div 6a$

16) $(m^3 + 20m^2 + 3m) \div 4m^3$

17) $(27x^3 + 5x^2 + 9x) \div 9x^3$

18) $(30n^3 + 2n^2 + 10n) \div 10n^3$

Assignment

Date _____ Period _____

Perform the indicated operation.

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

2) $g(n) = 3n^3 + 5 - n$
 $h(n) = n - 4$
Find $(g \cdot h)(n)$
 $3n^4 - 12n^3 - n^2 + 9n - 20$

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

4) $f(n) = 3n + 4$
 $g(n) = 2n + 5$
Find $(f \cdot g)(n)$
 $6n^2 + 23n + 20$

5) $h(x) = -4x - 3$
 $g(x) = 3x + 3$
Find $(h \cdot g)(x)$
 $-12x^2 - 21x - 9$

6) $g(n) = 3n + 5$
 $h(n) = n^2 - n$
Find $(g - h)(n)$
 $-n^2 + 4n + 5$

7) $h(t) = t^3 - t$
 $g(t) = t - 5$
Find $(h + g)(t)$
 $t^3 - 5$

8) $h(x) = 4x + 3$
 $g(x) = 2x + 2$
Find $(h \cdot g)(x)$
 $8x^2 + 14x + 6$

9) $g(n) = 3n - 4$
 $h(n) = n + 2$
Find $(g - h)(n)$
 $2n - 6$

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

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

12) $f(n) = 3n - 1$
 $g(n) = n^2 + 4n$
Find $(f + g)(n)$
 $n^2 + 7n - 1$

13) $f(n) = 2n - 5$
 $g(n) = n^2 - 5n$
Find $(f - g)(n)$
 $-n^2 + 7n - 5$

Divide.

14) $(4v^3 + 4v^2 + 24v) \div 8v^3$ $\frac{1}{2} + \frac{1}{2v} + \frac{3}{v^2}$

15) $(12a^3 + 4a^2 + 4a) \div 6a$ $2a^2 + \frac{2a}{3} + \frac{2}{3}$

16) $(m^3 + 20m^2 + 3m) \div 4m^3$ $\frac{1}{4} + \frac{5}{m} + \frac{3}{4m^2}$

17) $(27x^3 + 5x^2 + 9x) \div 9x^3$ $3 + \frac{5}{9x} + \frac{1}{x^2}$

18) $(30n^3 + 2n^2 + 10n) \div 10n^3$ $3 + \frac{1}{5n} + \frac{1}{n^2}$