Pre-Calculus Name_____ ID: 1

Assignment

Date_____ Period____

Perform the indicated operation.

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

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

3) $g(x) = x^2 - 5 - x$
$f(x) = 2x + 4$
Find $g(0) \cdot f(0)$

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

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

6) $f(t) = t^3 + 4t^2$
$g(t) = 2t + 2$
Find $f(3) + g(3)$

7) $h(x) = 2x - 5$
$g(x) = -2x^2 + 4x$
Find $h(-9) \div g(-9)$

8) $f(a) = a - 1$
$g(a) = 4a + 4$
Find $f(-4) - g(-4)$

9) $h(t) = 2t - 1$
$g(t) = 4t + 3$
Find $h(4) - g(4)$

10) $f(x) = x + 1$
$g(x) = x^2 + 5x$
Find $f(2) \div g(2)$

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

12) $g(x) = -3x + 4$
$h(x) = x - 1$
Find $g(-8) + h(-8)$

13) $h(t) = t^2 - 6t$
$g(t) = -3t + 2$
Find $h(2) + g(2)$

14) $f(n) = 2n - 4$
$g(n) = n^2 + 2n$
Find $f(4) \cdot g(4)$

15) $g(x) = 3x + 5$
$h(x) = -2x - 1$
Find $g(5) \div h(5)$

16) $g(x) = -x + 5$
$h(x) = 3x - 5$
Find $g(-1) \cdot h(-1)$

17) $h(a) = 3a + 1$
$g(a) = a^3 - 5a^2$
Find $h(3) - g(3)$

18) $f(t) = 3t + 5$
$g(t) = t^2 - 5$
Find $f(-1) - g(-1)$

19) $g(a) = -3a - 2$
$h(a) = -2a + 4$
Find $g(7) - h(7)$

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

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

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

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

24) $g(x) = x - 2$
$h(x) = 4x + 1$
Find $g(9) + h(9)$

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

26) $h(x) = 3x^3 + 4x$
$g(x) = -x - 4$
Find $h(0) - g(0)$

27) $g(n) = 4n$
$h(n) = -2n + 1$
Find $g(-8) \div h(-8)$

28) $g(n) = 3n + 2$
$h(n) = 2n - 4$
Find $g(3) \div h(3)$

29) $g(x) = x^2 + 5x$
$h(x) = -x - 4$
Find $g(8) - h(8)$

30) $g(x) = 3x - 3$
$h(x) = x - 1$
Find $g(-8) + h(-8)$

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

32) $h(a) = 3a - 2$
$g(a) = 3a + 3$
Find $h(-9) + g(-9)$

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

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

35) $g(x) = 4x + 4$
$h(x) = 2x + 2$
Find $g(-10) \div h(-10)$

36) $g(a) = -a - 4$
$f(a) = a^2 - 1$
Find $g(0) \cdot f(0)$

37) $g(t) = 2t + 5$
$f(t) = 4t - 2$
Find $g(9) - f(9)$

38) $g(a) = 3a - 2$
$h(a) = 4a - 5$
Find $g(2) \cdot h(2)$

39) $f(a) = -4a - 4$
$g(a) = a^2 - 2$
Find $f(7) + g(7)$

40) $g(x) = 4x + 4$
$h(x) = 3x - 1$
Find $g(7) + h(7)$

Identify the domain and range of each.

41) $y = \sqrt{x + 1}$

42) $y = \sqrt{x + 6}$

43) $y = \frac{4}{5}\sqrt{x + 1}$

44) $y = -2\sqrt{x - 3} - 4$

45) $y = \frac{2}{3}\sqrt{x - 1} - 1$

46) $y = \sqrt{x - 4}$

47) $y = \sqrt{x - 3} - 2$

48) $y = -2\sqrt{x - 2}$

49) $y = -3\sqrt{x - 2}$

50) $y = \sqrt{x + 5}$

Pre-Calculus Name_____ ID: 1

Assignment

Date_____ Period____

Perform the indicated operation.

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

112

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

19

3) $g(x) = x^2 - 5 - x$
$f(x) = 2x + 4$
Find $g(0) \cdot f(0)$

-20

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

-165

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

4

6) $f(t) = t^3 + 4t^2$
$g(t) = 2t + 2$
Find $f(3) + g(3)$

71

7) $h(x) = 2x - 5$
$g(x) = -2x^2 + 4x$
Find $h(-9) \div g(-9)$

$\frac{23}{198}$

8) $f(a) = a - 1$
$g(a) = 4a + 4$
Find $f(-4) - g(-4)$

7

9) $h(t) = 2t - 1$
$g(t) = 4t + 3$
Find $h(4) - g(4)$

-12

10) $f(x) = x + 1$
$g(x) = x^2 + 5x$
Find $f(2) \div g(2)$

$\frac{3}{14}$

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

-9

12) $g(x) = -3x + 4$
$h(x) = x - 1$
Find $g(-8) + h(-8)$

19

13) $h(t) = t^2 - 6t$
$g(t) = -3t + 2$
Find $h(2) + g(2)$

-12

14) $f(n) = 2n - 4$
$g(n) = n^2 + 2n$
Find $f(4) \cdot g(4)$

96

15) $g(x) = 3x + 5$
$h(x) = -2x - 1$
Find $g(5) \div h(5)$

$-\frac{20}{11}$

16) $g(x) = -x + 5$
$h(x) = 3x - 5$
Find $g(-1) \cdot h(-1)$

-48

17) $h(a) = 3a + 1$
$g(a) = a^3 - 5a^2$
Find $h(3) - g(3)$

28

18) $f(t) = 3t + 5$
$g(t) = t^2 - 5$
Find $f(-1) - g(-1)$

6

19) $g(a) = -3a - 2$
$h(a) = -2a + 4$
Find $g(7) - h(7)$

-13

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

$-\frac{11}{14}$

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

8

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

4

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

42

24) $g(x) = x - 2$
$h(x) = 4x + 1$
Find $g(9) + h(9)$

44

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

9

26) $h(x) = 3x^3 + 4x$
$g(x) = -x - 4$
Find $h(0) - g(0)$

4

27) $g(n) = 4n$
$h(n) = -2n + 1$
Find $g(-8) \div h(-8)$

$-\frac{32}{17}$

28) $g(n) = 3n + 2$
$h(n) = 2n - 4$
Find $g(3) \div h(3)$

$\frac{11}{2}$

29) $g(x) = x^2 + 5x$
$h(x) = -x - 4$
Find $g(8) - h(8)$

116

30) $g(x) = 3x - 3$
$h(x) = x - 1$
Find $g(-8) + h(-8)$

-36

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

-14

32) $h(a) = 3a - 2$
$g(a) = 3a + 3$
Find $h(-9) + g(-9)$

-53

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

-134

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

32

35) $g(x) = 4x + 4$
$h(x) = 2x + 2$
Find $g(-10) \div h(-10)$

2

36) $g(a) = -a - 4$
$f(a) = a^2 - 1$
Find $g(0) \cdot f(0)$

4

37) $g(t) = 2t + 5$
$f(t) = 4t - 2$
Find $g(9) - f(9)$

-11

38) $g(a) = 3a - 2$
$h(a) = 4a - 5$
Find $g(2) \cdot h(2)$

12

39) $f(a) = -4a - 4$
$g(a) = a^2 - 2$
Find $f(7) + g(7)$

15

40) $g(x) = 4x + 4$
$h(x) = 3x - 1$
Find $g(7) + h(7)$

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Identify the domain and range of each.

41) $y = \sqrt{x + 1}$

Domain: $x \geq -1$
Range: $y \geq 0$

42) $y = \sqrt{x + 6}$

Domain: $x \geq -6$
Range: $y \geq 0$

43) $y = \frac{4}{5}\sqrt{x + 1}$

Domain: $x \geq -1$
Range: $y \geq 0$

44) $y = -2\sqrt{x - 3} - 4$

Domain: $x \geq 3$
Range: $y \leq -4$

45) $y = \frac{2}{3}\sqrt{x - 1} - 1$

Domain: $x \geq 1$
Range: $y \geq -1$

46) $y = \sqrt{x - 4}$

Domain: $x \geq 4$
Range: $y \geq 0$

47) $y = \sqrt{x - 3} - 2$

Domain: $x \geq 3$
Range: $y \geq -2$

48) $y = -2\sqrt{x - 2}$

Domain: $x \geq 2$
Range: $y \leq 0$

49) $y = -3\sqrt{x - 2}$

Domain: $x \geq 2$
Range: $y \leq 0$

50) $y = \sqrt{x + 5}$

Domain: $x \geq -5$
Range: $y \geq 0$