

Adding and Subtracting Functions

 **Perform the indicated operation.**

1) $f(x) = 2x + 4$

$g(x) = x + 3$

Find $(f - g)(1)$

2) $g(a) = 2a - 1$

$f(a) = -a - 4$

Find $(g - f)(-1)$

3) $h(t) = 2t + 1$

$g(t) = 2t + 2$

Find $(h - g)(t)$

4) $g(a) = -3a - 3$

$f(a) = a^2 + 5$

Find $(g - f)(a)$

5) $g(x) = 2x - 5$

$h(x) = 4x + 5$

Find $g(3) - h(3)$

6) $h(3) = 3x + 3$

$g(x) = -4x + 1$

Find $(h + g)(10)$

7) $f(x) = 4x - 3$

$g(x) = x^3 + 2x$

Find $(f - g)(4)$

8) $h(n) = 4n + 5$

$g(n) = 3n + 4$

Find $(h - g)(n)$

9) $g(x) = -x^2 - 1 - 2x$

$f(x) = 5 + x$

Find $(g - f)(x)$

10) $g(t) = 2t + 5$

$f(t) = -t^2 + 5$

Find $(g + f)(t)$

11) $f(x) = 3x + 2$

$g(x) = -2x^2 + x$

Find $(f + g)(x)$

12) $f(x) = -2x^2 - 4x$

$g(x) = 4x + 3$

Find $(f + g)(x^2)$ 

Answers***Adding and Subtracting Functions***

1) 2

2) 0

3) -1

4) $-a^2 - 3a - 8$

5) -16

6) -6

7) -59

8) $n + 1$

9) $-x^2 - 3x - 6$

10) $-t^2 + 2t + 10$

11) $-2x^2 + 4x + 2$

12) $-2x^6 + 3$

