Function Operations Worksheet A

1. Given $f(x) = 3x + 2$ and $g(x) = x - 6$ find each of the following.

    a. $f(3)$ **b.** $g(-2)$ **c.** $f(0)$

    d. $f(-4)$ **e.** $g(7)$ **f.** $g(12)$

2. Given $f(x) = 4x - 5$ and $g(x) = 2x + 1$ find each of the following.

    a. $f(7)$ **b.** $f(4) + g(2)$ **c.** $f(x) + g(x)$

    d. $f(x) - g(x)$ **e.** $f(3)$ **f.** $g(6) - g(2)$

3. Given $f(x) = x^2 + 6$ and $g(x) = x - 6$ find each of the following.

    a. $f(-3)$ **b.** $g(18)$ **c.** $f(5) + g(7)$

    d. $f(6) - f(4)$ **e.** $f(a)$ **f.** $g(y)$

4. Given $f(x) = 3x - 6$, $g(x) = x - 12$, and $h(x) = x^2 - 3$ find each of the following.

    a. $f(-3) - g(8)$ **b.** $h(x) + g(x)$ **c.** $h(4) - h(2)$

    d. $f(3) + g(-2) - h(3)$ **e.** $g(7) + f(-2)$ **f.** $f(a) + g(a)$

5. Given $f(x) = 2x^2 - 3$, $g(x) = 5x + 2$, and $h(x) = -x^2 + 1$ find each of the following.

    a. $h(3)$ **b.** $f(x) + h(x)$ **c.** $f(3) + g(4)$

    d. $g(3) - h(2) + h(-2)$ **e.** $f(4) + g(4) + h(4)$ **f.** $f(x) - g(x) - h(x)$