

**Function Evaluation & Operations (Part 1)**

For each problem on this page, use the following five functions: (Hint, simplify each first if necessary)

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

$$j(x) = -2(x + 5) + 9x$$

$$k(x) = 2x^2 - (5x^2 - 2x) + 6$$

$$g(x) = 3x^2 + 5x + 2$$

$$h(x) = x^2 - 2x - 9$$

$$j(x) = \underline{\hspace{2cm}}$$

$$k(x) = \underline{\hspace{2cm}}$$

I. Evaluate each function at the given value.

1)  $f(2)$

2)  $g(-2)$

3)  $h(0)$

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4)  $k(7)$

5)  $g(4) + j(0)$

6)  $f(4) + g(2) - k(4)$

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II. Perform the following operations using the same functions listed above.

7)  $f(x) + h(x)$

8)  $g(x) - h(x)$

9)  $j(x) + k(x)$

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10)  $f(x) - j(x)$

11)  $f(x) - j(x) + k(x)$

12)  $j(x) + k(x) - j(x)$

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