

Name _____
Mrs. Roubos

Date _____
8A Period ____

Do Now

Performing operations with Linear Functions

* A linear function is a function in which when you graph it on a coordinate plane you would get a straight line.

* $f(x)$, $g(x)$, $h(x)$ are examples of notations that may be used to represent linear function.

* If you have a linear function you may perform operations on the functions.

Examples:

1) Given $f(x) = 3x - 1$ and $g(x) = -2x + 2$, find $h(x) = f(x) + g(x)$

2) Given $f(x) = x + 5$ and $g(x) = 4x - 2$, find $h(x) = f(x) - g(x)$

3) Given $f(x) = 3$ and $g(x) = \frac{1}{3}x - 2$, find $h(x) = f(x) \cdot g(x)$

4) Given $f(x) = 4$, $g(x) = x + 1$, and $h(x) = x$, find $j(x) = f(x) \cdot [g(x) + h(x)]$