ALG III 10/9/17   Name:_____
5.3 Combinations of Functions

Warm Up: Given $f(x) = -x^2 + 5x - 11$, find $f(-4)$

EX #1: Given $f(x) = 3x^2 + 8x - 6$ and $g(x) = -4x^2 + 4x - 8$

- Find $(f + g)(x)$

- Find $(f - g)(x)$

- Find $(f + g)(2)$

- Find $f(2) + g(2)$

- Find $(f - g)(x)$
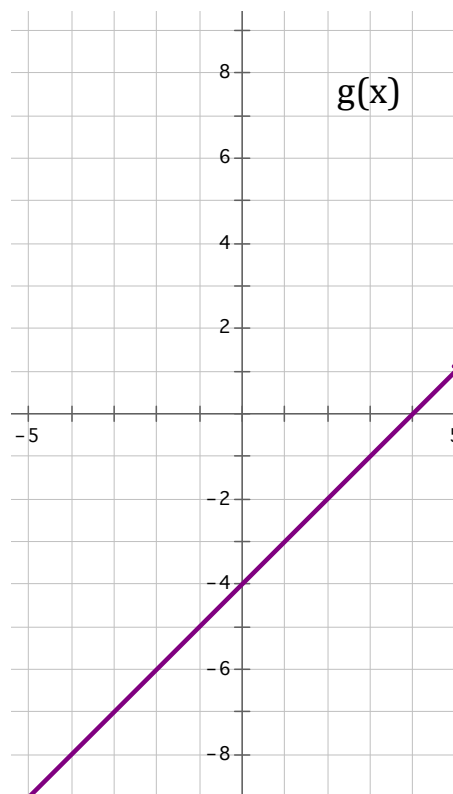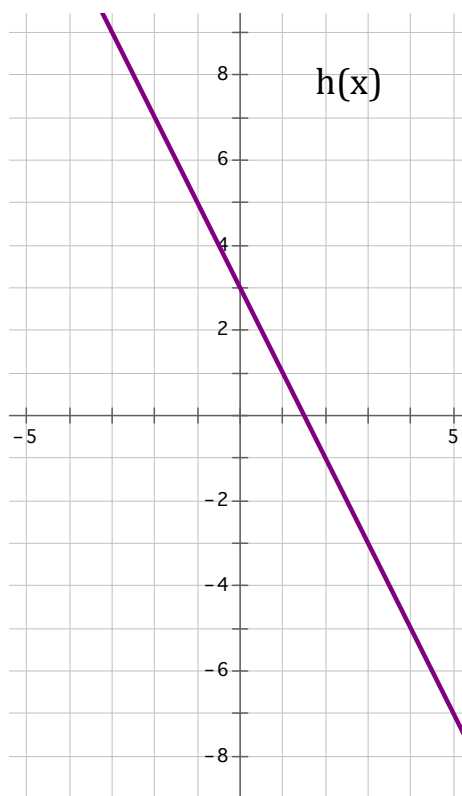
- Find $(f + g)(-3)$

EX #2: The number of U.S. households estimated to pay one bill online each month during the years 2000 through 2013 can be modeled by the polynomial function defined by

$$P(x) = 0.808x^2 + 2.625x + 0.502$$

Where x = 0 corresponds to 2000, and x =1 corresponds to 2001.

Use this function to approximate the number of households that paid at least one bill online each month in 2008.

EX #3: Given the following graphs of $h(x)$ and $k(x)$

h(x)

g(x)

Find $(h+k)(3)$ $(k-h)(0)$ $(h-k)(0)$ $(h \cdot k)(-2)$

Assignment: pg. 263 #17-28