BME 799.01: Engineering Programming and Signal Processing
Fall 2013
Worksheet 4

Instructions: Program the following in MATLAB working independently or with a partner. Be sure to save your .m file and send it to me (as well as your images) for review.

1. In class we played around with flipping shifting and scaling. First I'd like you to open a script file and intialize the variable t for time equal to -2 to 4 with a step size of .1.
2. Create your x(t) that was drawn in class and plot t verses x(t) in the color of your choice.
3. Now plot the new shifted/flipped/scaled version of x(t) in MATLAB without hardcoding it (i.e. come up with a way to plot it independent of what x(t) actually is).
4. Now that you've uncovered a way to arbitrarily flip, shift, and scale your resultant x(t), write a new MATLAB function called flipshift.m that will take the input of t, x(t), +/- scale, and shift and will output the new t2, the original x(t). Use the function flipshift to flip, shift, and scale your original function and plot the result. Turn all .m files and figures (saved as .pdf again please) to Sakai.