PROBLEM:

Suppose that a MATLAB function has been written to calculate a sum of discrete-time sinusoids, e.g., something similar to the `makecos( )` that was written for the lab. Here is the actual function:

```
function  xn = makedcos(omegahat,ZZ,Length)
xn = real( exp( j*(0:Length-1)'*omegahat(:)' ) * ZZ(:) );
```

If the following MATLAB command is used to make an output sound:

```
soundsc( makedcos(pi*(0.5:0.4:1.5),[-2i,1i,3-4i],1000000), 1000 )
```

(a) Draw a plot of the discrete-time spectrum (vs. $\hat{\omega}$) of the discrete-time signal defined by this MATLAB operation. Make sure that you include all the spectrum components in the $-\pi$ to $+\pi$ interval.

(b) Draw a plot of the continuous-time spectrum (vs. f in Hz) of the analog output signal defined by the `soundsc()` function.