PROBLEM:

Suppose that a MATLAB function has been written to calculate a sum of discrete-time sinusoids:

```
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*linspace(0,0.8,3),[-1,j,1-j],4000), 8000 )
```

(a) Draw a plot of the discrete-time spectrum (vs. $\hat{\omega}$) of the discrete-time signal defined by this MATLAB operation.

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