PROBLEM:

The following MATLAB program makes a plot of a "sine-times-cosine" signal:

```
tt = 0:0.01:4;
xx = sin(18*pi*tt) .* cos(pi*tt);
plot(tt,xx)
```

(a) Make a sketch of the plot that will be done by MATLAB. Label the time axis carefully.

(b) The "spectrum" diagram gives the frequency content of a signal. Draw a sketch of the spectrum of the signal represented by `xx`. Label the frequencies and complex amplitudes of each component.