

PROBLEM:

The following MATLAB program makes a plot of a “sum-of-sines” signal:

```
ttt = 0:(1/1000):0.5;  
xxx = sin(100*pi*ttt) + sin(108*pi*ttt);  
plot(ttt, xxx)
```

- Make a sketch of the plot that will be done by MATLAB. Label the time axis carefully.
- The “spectrum” diagram gives the frequency content of a signal. Draw a sketch of the spectrum of the signal represented by `xxx`. Label the frequencies and complex amplitudes of each component.