PROBLEM:

The intention of the following MATLAB program was to plot 13 cycles of a 13 Hz sinusoid, but it has a bug.

```
Fo = 13;
Period = 1/Fo;
delta = 0.07;
tt = 0 : delta : (13*Period);
j = sqrt(-1);
xx = real( exp( j*(2*pi*Fo*tt  - pi/2) ) );
stem( tt, xx ),  xlabel('TIME   (sec)'),  grid
```

(a) Draw a sketch of the plot that will be done by MATLAB. EXPLAIN how aliasing or folding affects the plot that you see. In particular, how many periods do you observe?

(b) Determine an acceptable value of delta to get a | very smooth plot | of the desired 13 Hz signal.