

PROBLEM:

The intention of the following MATLAB program was to plot ten cycles of a 900 Hz sinusoid, but it has a bug.

```
Fo = 900;  
Period = 1/Fo;  
delta = 0.001;  
tt = 0 : delta : (10*Period);  
j = sqrt(-1);  
xx = real( exp( j*(2*pi*Fo*tt - pi/2) ) );  
plot( tt, xx ), grid  
xlabel('TIME (sec)')
```

- 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?
- Determine an acceptable value of `delta` to get a *smooth* plot of the desired 900 Hz signal.