EE 451: Homework 1

1. #2.1 from textbook

2. #2.19 from textbook

3. #2.24 from textbook

4. #2.37 from textbook

5. Write a MATLAB code to generate the sinusoidal sequence given by

$$x(n) = \cos(\omega_0 n)$$

for

   (a) $\omega_0 = 0$
   (b) $\omega_0 = 0.1\pi$
   (c) $\omega_0 = 0.2\pi$
   (d) $\omega_0 = 0.8\pi$
   (e) $\omega_0 = 0.9\pi$
   (f) $\omega_0 = \pi$
   (g) $\omega_0 = 1.1\pi$
   (h) $\omega_0 = 1.2\pi$

   use the **stem** function to plot your results and make sure you label all your figures.