

Homework Problems:

1. 2.1 (from textbook)
2. 2.19 (from textbook)
3. 2.24 (from textbook)
4. 2.37 (from textbook)
5. Write a MATLAB program 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.