Paste MATLAB code and plots on this word document.

1. Discrete sequence-----MATLAB

Consider the following formula

Find the rest of the sequence for and plot it using the MATLAB function stem.

1. Periodicity of sampled signals---MATLAB

Consider an analog periodic sinusoid x(t)= being sampled using a sampling period to obtain the discrete-time signal

1. Determine the discrete frequency of x[n]
2. Choose a value of for which the discrete-time signal x[n] is periodic. Use MATLAB to plot a few periods of x[n], and verify its periodicity
3. Choose value of for which the discrete—time signal x[n] is not periodic. Use MATLAB to plot x[n] and choose an appropriate length to show the signal is not periodic.
4. Determine under what condition the value of makes x[n] periodic.