

EECS 360
Homework #12

1. Section 6.1 Participation Activities
 - 6.1.1: Transformations for Digital Signal Processing (DSP)
 - 6.1.2: Discrete-time signal transformations.
 - 6.1.3: Discrete-time signal durations and transformations
2. Section 6.2 Participation Activities
 - 6.2.1: Sampling rate and discrete-time period and frequency
 - 6.2.2: Discrete-time periodic parameters.
 - 6.2.3: Periodic parameter values.
 - 6.2.4: Periodic continuous-time vs. discrete-time functions.
 - 6.2.5: Discrete sinusoids.
3. Section 6.2 Challenge Activity
 - 6.2.1: Discrete-time signal functions
4. Exercise 6.2.1
5. Section 6.4 Participation Activities
 - 6.4.1: Properties of discrete-time systems, part one.
 - 6.4.2: Properties of discrete-time systems, part two.
 - 6.4.3: Impulse response of MA (moving average) system.
 - 6.4.4: Step response of moving average system.
 - 6.4.5: ARMA system, impulse and step responses.
 - 6.4.6: ARMA system, $|p| < 1$ impulse and step responses.
 - 6.4.7: Discrete-time system stability.
6. Section 6.3 Challenge Activity
 - 6.4.1: Properties of discrete-time LTI systems
7. Exercise 6.4.1
8. Exercise 6.4.2
9. Exercise 6.4.3
10. Section 6.5 Participation Activities
 - 6.5.1: Example: delayed-impulses convolution method.
 - 6.5.2: Delayed-impulses convolution, input
 - 6.5.3: Discrete-time convolution via delayed impulses.
 - 6.5.4: Graphical or textual sliding convolution.
 - 6.5.5: Graphical convolution process.
 - 6.5.6: Graphical convolution values.
11. Section 6.5 Challenge Activity
 - 6.5.1: Discrete-time convolution.
12. Exercise 6.5.1
13. Exercise 6.5.5