

ECE 306 - INVESTIGATION 1 - INTRODUCTION TO DISCRETE SIGNALS AND SYSTEMS

1. Sketching the responses of some analog circuits to $x(t) = 5\cos(2000t)$

a. Sketch of $x(t)$

b. Attenuator: $y(t) = 0.5x(t)$

.
.
.

2. Sketching the responses of some discrete systems to

$$x[-2] = 1, x[-1] = 1, x[0] = -1, x[1] = -2, x[2] = 1, x[3] = 1$$

a. Sketch of $x[n]$

b. Attenuator: $y[n] = 0.5x[n]$

.
.
.