

EE 5368 HW#1 Assignment.

- (1). What are the advantages and disadvantages of Digital Communication?
- (2). Using mathematic expressions to explain sampling theorem
- (3). In the class notes, the traditional telephone signal transmission rate is 64 Kbit/second. What are the signal transmission rates for CD, DVD, MP3, HDTV, and VOIP?

(4). What are the definitions for Random Variable & Random processes (stochastic processes)?

Classify the following Random processes

(a) stationary Random processes?

(b) non-stationary Random processes?

(c) Wide-sense (weakly) stationary processes?

(d) Ergodic wide-sense stationary processes?

(5). What's the difference between FDD and FDMA
TDD TDMA.