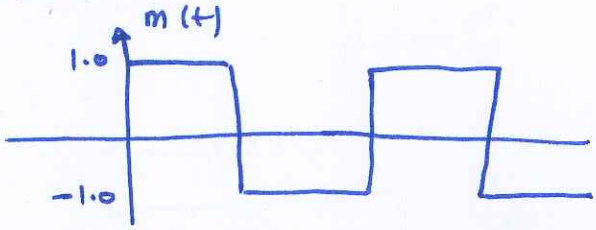
BIRZEIT UNIVERSITY

BIRZEIT UNIVERSITY
Faculty of Engineering
Electrical And Computer Engineering Department
Communication Systems– ENEE 3309
Suggested Problems

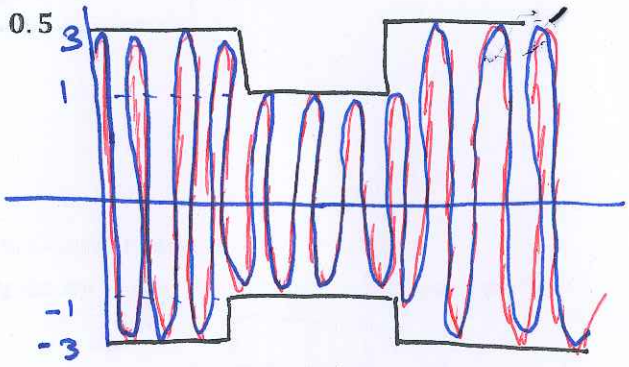
Instructors: Dr. Ashraf Rimawi **Nov.08, 2021**

Problem #1 (10 points): Consider A modulating signal $m(t)$ is a square wave shown in below. Assume the carrier is given by $c(t) = 2\ sin(8\ \pi\ t)$ v

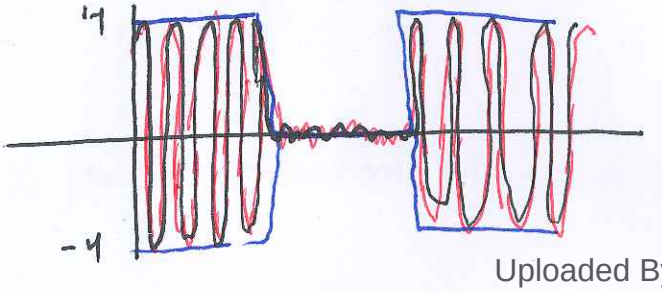


a. Plot normal AM modulated signal at $\mu = 0.5$

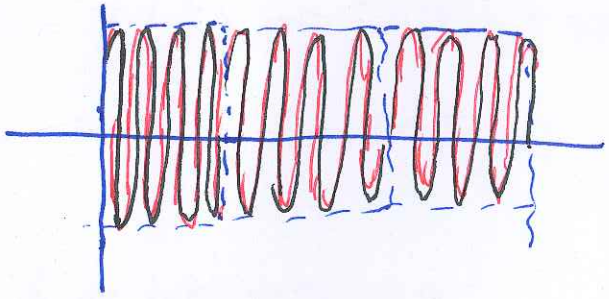
$S_{AM}(t) = A_c [1 + k_a m(t)] c(t)$



b. Plot normal AM modulated at $\mu = 1$



c. Plot DSB-SC modulated signal



GOOD LUCK ☺