Part E

C)

Theoretically FT of m[n] is rect

r[n]=m[n]\*cos(30\*pi\*n);

r[n]=m[n]\*(1/2J)[e30\*pi\*j\*n ~~+~~ e-30\*pi\*j\*n ]

Relation:

R[jw]=(1/2j)\*[ m[w-30\*pi] +m[w +30\*pi]];

Therefore R[jw]=(1/2j) F.t of m[n] shifted +30\*pi and -30\*pi

R[jw] is rect shifted +30\*pi and -30\*pi