1.3

Σχεδιασμός εξόδου y1[n]:

Σχεδιασμός h1[n]:

h1[n] = 0 για n ∈ (-∞, -5) U [5, +∞)

n = -5: h1[-5] = sin(25π/3) ≈ 0,87

n = -4: h1[-4] = sin(20π/3) ≈ 0,87

n = -3: h1[-3] = sin(15π/3) ≈ 2,39

n = -2: h1[-2] = sin(10π/3) ≈-0,87

n = -1: h1[-1] = sin(5π/3) ≈ -0,87

n = 0: h1[0] = 0

n = 1: h1[1] = -sin(5π/3) ≈ 0,87

n = 2: h1[2] = -sin(10π/3) ≈0,87

n = 3: h1[3] = -sin(15π/3) ≈ -2,39

n = 4: h1[4] = -sin(20π/3) ≈ -0,87

Σχεδιασμός h2[n]:

h2[n] = 0 για n ∈ [5, +∞)

n = -5: h2[-5] = 5-5sin(25π/3) ≈ 0,00028

n = -4: h2[-4] = 5-4sin(20π/3) ≈ 0,0014

n = -3: h2[-3] = 5-3sin(15π/3) ≈ 0,01912

n = -2: h2[-2] = 5-2sin(10π/3) ≈ -0,0348

n = -1: h2[-1] = 5-1sin(5π/3) ≈ -0,174

n = 0: h2[0] = 0

n = 1: h2[1] = -51sin(5π/3) ≈ 4,35

n = 2: h2[2] = -52sin(10π/3) ≈21,75

n = 3: h2[3] = -53sin(15π/3) ≈ -298,75

n = 4: h2[4] = -54sin(20π/3) ≈ -543,75

Σχεδίαση εξόδου y2[n]:

Σχεδίαση εισόδου h2(t):

Σχεδίαση εξόδου y2(t):

1.4 α)