

HW12: Wave Equation Solution (Corrected)

Time = 0.000

x = 0.00, u = 1.000000
x = 0.10, u = 0.809017
x = 0.20, u = 0.309017
x = 0.30, u = -0.309017
x = 0.40, u = -0.809017
x = 0.50, u = -1.000000
x = 0.60, u = -0.809017
x = 0.70, u = -0.309017
x = 0.80, u = 0.309017
x = 0.90, u = 0.809017
x = 1.00, u = 1.000000

Time = 1.000

x = 0.00, u = 1.000000
x = 0.10, u = 0.844404
x = 0.20, u = 0.368183
x = 0.30, u = -0.248670
x = 0.40, u = -0.770540
x = 0.50, u = -0.998090
x = 0.60, u = -0.844404
x = 0.70, u = -0.368183
x = 0.80, u = 0.248670
x = 0.90, u = 0.770540
x = 1.00, u = 2.000000

Time = 0.050

x = 0.00, u = 1.000000
x = 0.10, u = 0.953471
x = 0.20, u = 0.588618
x = 0.30, u = -0.000139
x = 0.40, u = -0.588836
x = 0.50, u = -0.952618
x = 0.60, u = -0.952532
x = 0.70, u = -0.588605
x = 0.80, u = 0.001617
x = 0.90, u = 0.686810
x = 1.00, u = 2.000000

Time = 0.100

x = 0.00, u = 1.000000

x = 0.10, u = 1.020384

x = 0.20, u = 0.812897

x = 0.30, u = 0.308761

x = 0.40, u = -0.312855

x = 0.50, u = -0.814962

x = 0.60, u = -1.005770

x = 0.70, u = -0.811570

x = 0.80, u = -0.278804

x = 0.90, u = 0.715901

x = 1.00, u = 2.000000