u(x, t)
T = 0.000000: 0.000000 0.077254 0.146946 0.202254 0.237764 0.250000 0.237764 0.202254 0.146946 0.077254 0.000000
T = 0.025000: 0.000000 0.075359 0.146679 0.210397 0.261709 0.288665 0.261709 0.210397 0.146679 0.075359 0.000000
T = 0.050000: 0.000000 0.082088 0.169586 0.260700 0.339869 0.376910 0.339869 0.260700 0.169586 0.082088 0.000000
T = 0.075000: 0.000000 0.126202 0.251804 0.366216 0.449660 0.483415 0.449660 0.366216 0.251804 0.126202 0.000000
T = 0.100000: 0.000000 0.195994 0.366663 0.497431 0.584975 0.622033 0.584975 0.497431 0.366663 0.195994 0.000000
T = 0.125000: 0.000000 0.241431 0.460957 0.640752 0.762832 0.808293 0.762832 0.640752 0.460957 0.241431 0.000000
T = 0.150000: 0.000000 0.280907 0.550475 0.782275 0.941993 1.002250 0.941993 0.782275 0.550475 0.280907 0.000000
T = 0.175000: 0.000000 0.346723 0.658838 0.910983 1.081661 1.144626 1.081661 0.910983 0.658838 0.346723 0.000000
T = 0.200000: 0.000000 0.395293 0.746338 1.016524 1.182747 1.239288 1.182747 1.016524 0.746338 0.395293 0.000000
T = 0.225000: 0.000000 0.404305 0.770257 1.060302 1.246698 1.311207 1.246698 1.060302 0.770257 0.404305 0.000000
T = 0.250000: 0.000000 0.391635 0.750052 1.046677 1.248042 1.321024 1.248042 1.046677 0.750052 0.391635 0.000000
T = 0.275000: 0.000000 0.374677 0.719636 0.997816 1.178666 1.243989 1.178666 0.997816 0.719636 0.374677 0.000000
T = 0.300000: 0.000000 0.351828 0.662655 0.905290 1.061420 1.115623 1.061420 0.905290 0.662655 0.351828 0.000000
T = 0.325000: 0.000000 0.294009 0.560347 0.773446 0.912479 0.963650 0.912479 0.773446 0.560347 0.294009 0.000000
T = 0.350000: 0.000000 0.222709 0.434606 0.615490 0.741794 0.789717 0.741794 0.615490 0.434606 0.222709 0.000000
T = 0.375000: 0.000000 0.168332 0.322388 0.453734 0.547270 0.583768 0.547270 0.453734 0.322388 0.168332 0.000000

T = 0.400000: 0.000000 0.115690 0.221393 0.303711 0.358765 0.383658 0.358765 0.303711 0.221393 0.115690 0.000000

T = 0.425000: 0.000000 0.058818 0.114967 0.169460 0.214419 0.234035 0.214419 0.169460 0.114967 0.058818 0.000000

T = 0.450000: 0.000000 0.012526 0.035614 0.069098 0.103750 0.123536 0.103750 0.069098 0.035614 0.012526 0.000000

T = 0.475000: 0.000000 -0.000710 0.003361 0.013613 0.028313 0.038558 0.028313 0.013613 0.003361 -0.000710 0.000000

T = 0.500000: 0.000000 0.001041 -0.001222 -0.002191 0.000343 0.004347 0.000343 -0.002191 -0.001222 0.001041 0.000000

a = 1.000000
l = 1.000000
n = 10
hx = 0.100000
ht = 0.025000
x0 = 0.500000

w(t)
 Columns 1 through 8:

  22.7500   63.5000   66.5000   37.7500   61.0000   29.5000   31.5000   23.7500

 Columns 9 through 16:

  12.2500   1.5000   15.5000   26.7500   6.7500   29.7500   25.5000   29.5000

 Columns 17 through 21:

  57.2500   26.5000   59.0000   30.5000   45.0000

h
 Columns 1 through 20:

  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

 Column 21:

  1

alpha = 0.800000
beta = 0.010000

B =
  0 -1
  1 0

C =
  2.00000 -0.80000

0.80000   2.00000

~C =
  2.00000   0.80000
 -0.80000   2.00000

u(x, t)
T = 0.000000: 0.000000 0.077254 0.146946 0.202254 0.237764 0.250000 0.237764 0.202254 0.146946 0.077254 0.000000
T = 0.025000: 0.000000 0.075359 0.146679 0.210397 0.261709 0.288665 0.261709 0.210397 0.146679 0.075359 0.000000
T = 0.050000: 0.000000 0.082088 0.169586 0.260700 0.339869 0.376910 0.339869 0.260700 0.169586 0.082088 0.000000
T = 0.075000: 0.000000 0.126202 0.251804 0.366216 0.449660 0.483415 0.449660 0.366216 0.251804 0.126202 0.000000
T = 0.100000: 0.000000 0.195994 0.366663 0.497431 0.584975 0.622033 0.584975 0.497431 0.366663 0.195994 0.000000
T = 0.125000: 0.000000 0.241431 0.460957 0.640752 0.762832 0.808293 0.762832 0.640752 0.460957 0.241431 0.000000
T = 0.150000: 0.000000 0.280907 0.550475 0.782275 0.941993 1.002250 0.941993 0.782275 0.550475 0.280907 0.000000
T = 0.175000: 0.000000 0.346723 0.658838 0.910983 1.081661 1.144626 1.081661 0.910983 0.658838 0.346723 0.000000
T = 0.200000: 0.000000 0.395293 0.746338 1.016524 1.182747 1.239288 1.182747 1.016524 0.746338 0.395293 0.000000
T = 0.225000: 0.000000 0.404305 0.770257 1.060302 1.246698 1.311207 1.246698 1.060302 0.770257 0.404305 0.000000
T = 0.250000: 0.000000 0.391635 0.750052 1.046677 1.248042 1.321024 1.248042 1.046677 0.750052 0.391635 0.000000
T = 0.275000: 0.000000 0.374677 0.719636 0.997816 1.178666 1.243989 1.178666 0.997816 0.719636 0.374677 0.000000
T = 0.300000: 0.000000 0.351828 0.662655 0.905290 1.061420 1.115623 1.061420 0.905290 0.662655 0.351828 0.000000
T = 0.325000: 0.000000 0.294009 0.560347 0.773446 0.912479 0.963650 0.912479 0.773446 0.560347 0.294009 0.000000
T = 0.350000: 0.000000 0.222709 0.434606 0.615490 0.741794 0.789717 0.741794 0.615490 0.434606 0.222709 0.000000
T = 0.375000: 0.000000 0.168332 0.322388 0.453734 0.547270 0.583768 0.547270 0.453734 0.322388 0.168332 0.000000
T = 0.400000: 0.000000 0.115690 0.221393 0.303711 0.358765 0.383658 0.358765 0.303711 0.221393 0.115690 0.000000
T = 0.425000: 0.000000 0.058818 0.114967 0.169460 0.214419 0.234035 0.214419 0.169460 0.114967 0.058818 0.000000
T = 0.450000: 0.000000 0.012526 0.035614 0.069098 0.103750 0.123536 0.103750 0.069098 0.035614 0.012526 0.000000
T = 0.475000: 0.000000 -0.000710 0.003361 0.013613 0.028313 0.038558 0.028313 0.013613 0.003361 -0.000710 0.000000
T = 0.500000: 0.000000 0.001041 -0.001222 -0.002191 0.000343 0.004347 0.000343 -0.002191 -0.001222 0.001041 0.000000

U(x, t)

W(t)