Console

x(0) = 0
y(0) = 1

 fx(1) =

   1.
  - 1.

  J =

  - 6.   0.
    0. - 3.

x(1) = -0.166667
y(1) = 1.33333

 fx(2) =

    1.8842593
  - 2.2592593

  J =

  - 10.583333   1.3333333
    - 1.3333333   - 5.25

x(2) = -0.286652
y(2) = 1.79414

 fx(3) =

    3.7445982
  - 5.3329641

  J =

  - 19.067143   3.085769
  - 3.085769   - 9.410317

x(3) = -0.386052
y(3) = 2.39345