The water temperature will remain constant at T=12.5

The Jacobian for the critical point (0,0) is:
J_1 =

     1277/2717   0
        0   -43/2667

The eigenvalues of the Jacobian above are:
     -43/2667
     1277/2717

The Jacobian for the critical point (0,6) is:
J_2 =

      624/2713   0
        3/6250   43/2667

The eigenvalues of the Jacobian above are:
      43/2667
      624/2713

The Jacobian for the critical point (15,0) is:
J_3 =

    -1277/2717   -3/5
        0   -94/6299

The eigenvalues of the Jacobian above are:
    -1277/2717
      -94/6299

The Jacobian for the critical point (7.630484,5.772832) is:
J_4 =

     -389/1627   -807/2644
       19/41141   97/6253

The eigenvalues of the Jacobian above are:
     -645/2704
      214/14307

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