Worksheet on Nonlinear Programming

For this problem determine:
  1. A potential feasible solution

  2. Identify the constraints on the
     contour plot

  3. Mark the set of feasible
     solutions on the contour plot

  4. The minimum feasible solution on
     the contour plot

  5. The maximum feasible solution on
     the contour plot

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Variables
  x1 = 1 , >= 1 , <= 5
  x2 = 5 , >= 1 , <= 5
  x3 = 5 , >= 1 , <= 5
  x4 = 1 , >= 1 , <= 5
End Variables

Equations
  minimize x1*x4*(x1+x2+x3) + x3

  x1*x2*x3*x4 > 25
  x1^2 + x2^2 + x3^2 + x4^2 = 40
End Equations
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NLP Contour Plot