```
In[3846]:= k = 15;
       tend = 300;
       x0 = 2.2; y0 = 2;
       x =.; y =.;
       Sol = NDSolve[{D[x[t], t] == k * (1 - x[t] * y[t]),
           D[y[t], t] == x[t] * y[t] - y[t], x[0] == x0, y[0] == y0}, {x, y}, {t, 0, tend}];

In[3851]:= P1 = ParametricPlot[{Evaluate[x[t] /. First[Sol]], Evaluate[y[t] /. First[Sol]]},
         {t, 0, tend}, PlotPoints → 2000, Mesh → False,
         PlotRange → {{0, 5.5}, {0, 5.5}}, PlotStyle → Black,
         FrameLabel → {Style["Aα", FontFamily → "Times New Roman", FontSlant → Italic,
             FontSize → 21, FontColor → Black], Style["Cα", FontFamily →
              "Times New Roman", FontSlant → Italic, FontSize → 21, FontColor → Black]},
         RotateLabel → True, Frame → {{Automatic, False}, {Automatic, False}},
         FrameTicks → {{{0, 1, 2, 3, 4, 5, 6}, None}, {{0, 1, 2, 3, 4, 5, 6}, None}},
         Epilog → {Inset[Graphics[{Black, Text[Style[
                 " Αρχικές συνθήκες ", 21, FontFamily → "MS Serif"]]}], {4.8, 5.1}],
           Inset[Graphics[{Black,
               Text[Style[" Θ. ασ. ευστ. σ.ι. ", 21, FontFamily → "MS Serif"]]}],
             {4.6, 4.6}], {Green, Text[Style["★", 20], {3.2, 4.6}]},
           {Green, Text[Style["★", 25], {1, 1}]}}];
       G0 = Graphics[{PointSize[0.02], Blue, Point[{3.2, 5.1}]}];
       G1 = Graphics[{PointSize[0.02], Blue, Point[{x0, y0}]}];


       x0 = 0.2; y0 = 4.8;
       Sol2 = NDSolve[{D[x[t], t] == k * (1 - x[t] * y[t]),
           D[y[t], t] == x[t] * y[t] - y[t], x[0] == x0, y[0] == y0}, {x, y}, {t, 0, tend}];
       P2 =
         ParametricPlot[{Evaluate[x[t] /. First[Sol2]], Evaluate[y[t] /. First[Sol2]]},
          {t, 0, tend}, PlotPoints → 2000, Mesh → False, PlotStyle → Black];
       G2 = Graphics[{PointSize[0.02], Blue, Point[{x0, y0}]}];

       x0 = 0.5; y0 = 0.5;
       Sol3 = NDSolve[{D[x[t], t] == k * (1 - x[t] * y[t]),
           D[y[t], t] == x[t] * y[t] - y[t], x[0] == x0, y[0] == y0}, {x, y}, {t, 0, tend}];
       P3 =
         ParametricPlot[{Evaluate[x[t] /. First[Sol3]], Evaluate[y[t] /. First[Sol3]]},
          {t, 0, tend}, PlotPoints → 2000, Mesh → False, PlotStyle → Black];
       G3 = Graphics[{PointSize[0.02], Blue, Point[{x0, y0}]}];



       Show[P1, P2, P3, G0, G1, G2, G3,
        ImageSize → {450, 450}, AspectRatio → Full, PlotLabel → None,
        LabelStyle → {21, GrayLevel[0]}, PlotRange → {{0, 6.2}, {0, 5.5}}]
```

Out[3862]=