

```

Exit[];

PrependTo[$Path, "D:\\Users\\Johannes\\Promotion\\SVN Rep\\Mathematica\\Packages"];
<< JoFin`

f[x_] := Log[If[x[[1]] == x[[2]], 10^(-15),
  Abs[x[[1]] - x[[2]]] / (Abs[x[[1]]] + Abs[x[[2]])]] / Log[10]

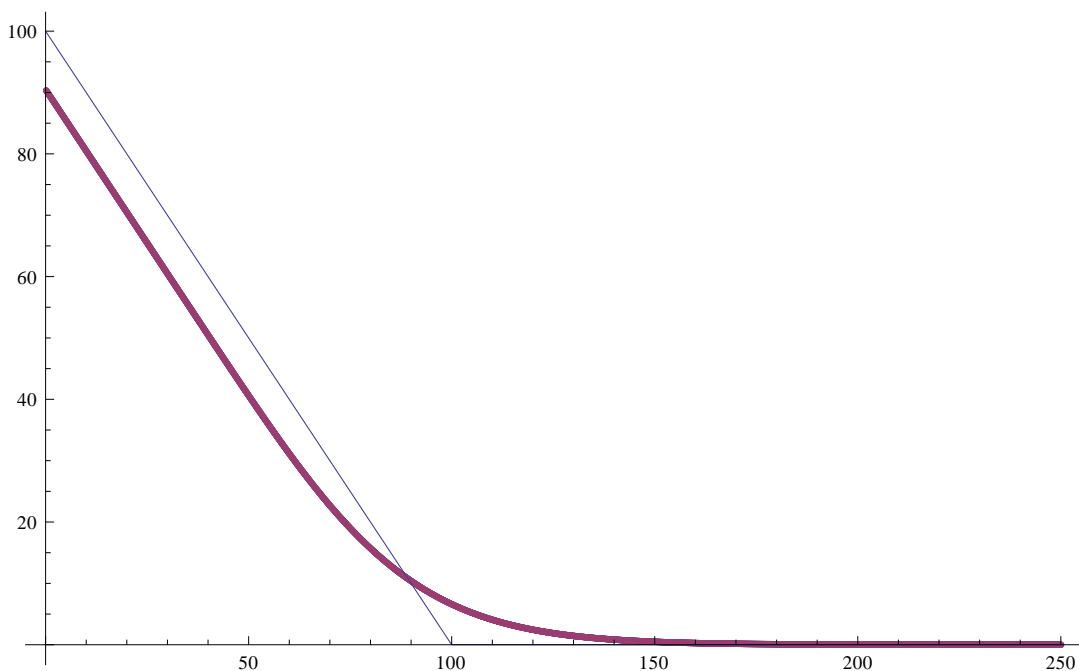
```

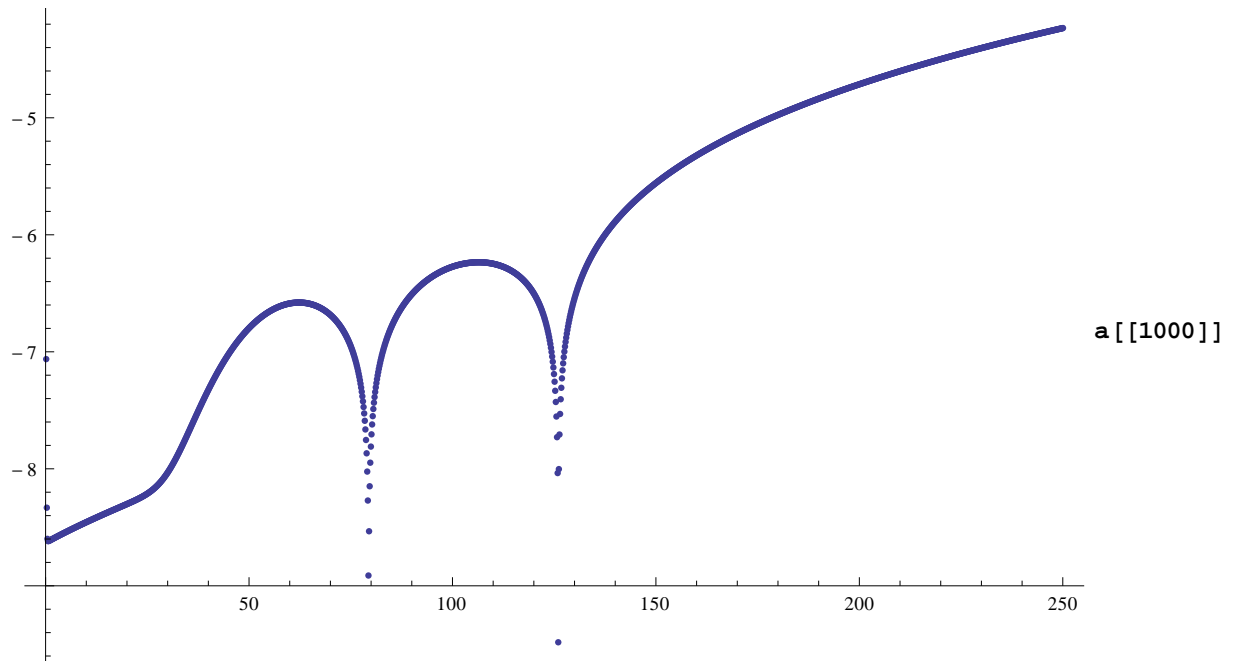
0.25

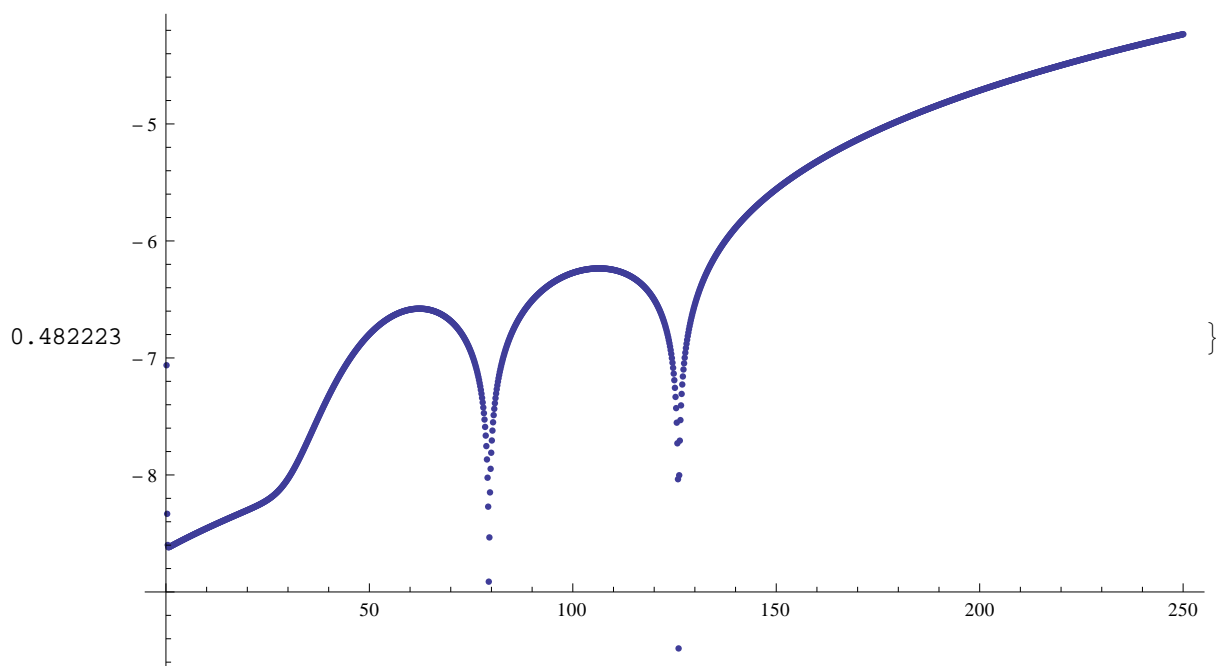
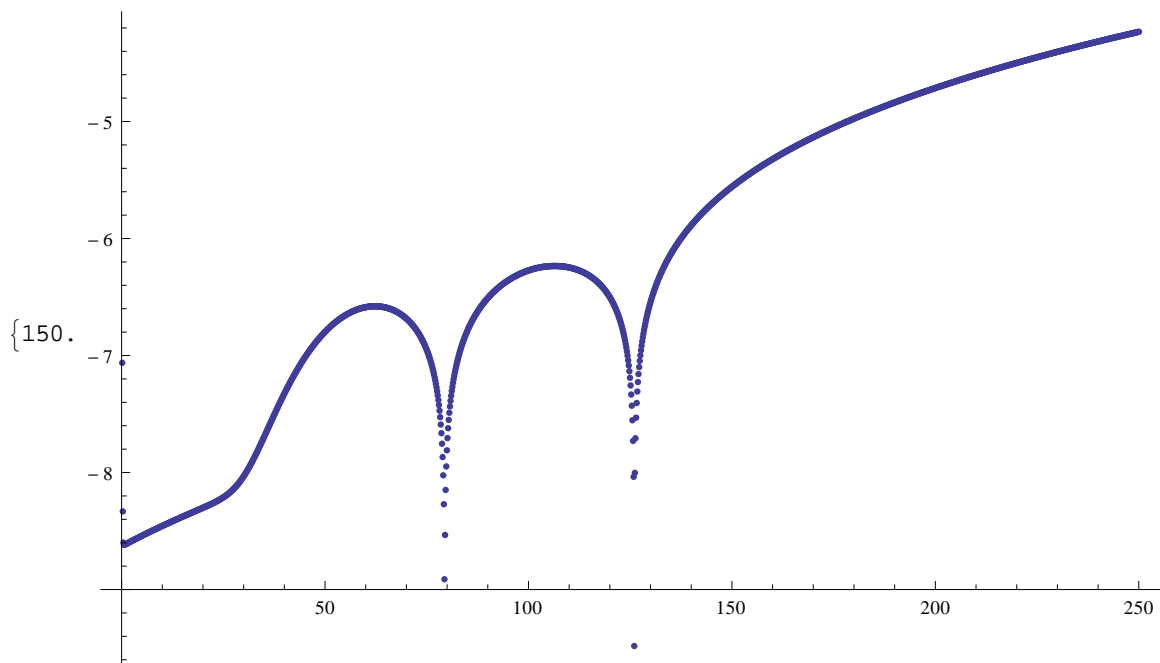
```

σ = 0.2; ρ = 0.3; n = 1; r = 0.05; T = 2; k = 100;
{σ, d} = IsometricGeometricAverageParameters[σ, 0, ρ, n];
a = Import[
  "D:\\Users\\Johannes\\Promotion\\SVN Rep\\Programmierung\\Tridiagonal Solver
  Tests\\output\\cut.txt", "Table"];
nn = Round[Length[a] / 6];
a = a[[;; nn]]; h = a[[2, 1]] - a[[1, 1]];
aS = Transpose[{a[[2 ;; -2, 1]], CentralDifferences[a[[;;, 2]]] / 2 / h}];
aSS = Transpose[{a[[2 ;; -2, 1]], Differences[a[[;;, 2]], 2] / h ^ 2}];
b = {#[[1]], BlackScholesPut[#[[1]], k, T, r, σ, d]} & /@ a;
bS = {#[[1]], BlackScholesPutDelta[#[[1]], k, T, r, σ, d]} & /@ a;
bSS = {#[[1]], BlackScholesPutGamma[#[[1]], k, T, r, σ, d]} & /@ a;
(*b=c;*)
Show[ListPlot[{a, b}, PlotRange → All],
  Plot[Max[k - x, 0], {x, Min[a[[;;, 1]]], Max[a[[;;, 1]]}], PlotRange → All]]
(*ListPlot[Transpose[{a[[;;, 1]], f /@ Transpose[{a[[;;, 2]], c[[;;, 2]]}]}]]
  Max[Select[Transpose[{a[[;;, 1]], f /@ Transpose[{a[[;;, 2]], c[[;;, 2]]}]}],
    90 ≤ #[[1]] ≤ 110 &][[;;, 2]]*)
ListPlot[Transpose[{a[[;;, 1]], f /@ Transpose[{a[[;;, 2]], b[[;;, 2]]}]}]]
ListPlot[{bS, aS}]
ListPlot[{bSS, aSS}, PlotRange → All]
Max[Select[Transpose[{a[[;;, 1]], f /@ Transpose[{a[[;;, 2]], b[[;;, 2]]}]}],
  650 ≤ #[[1]] ≤ 670 &][[;;, 2]]

```







4

`a[[150]]`

`{225., 0.00686411}`