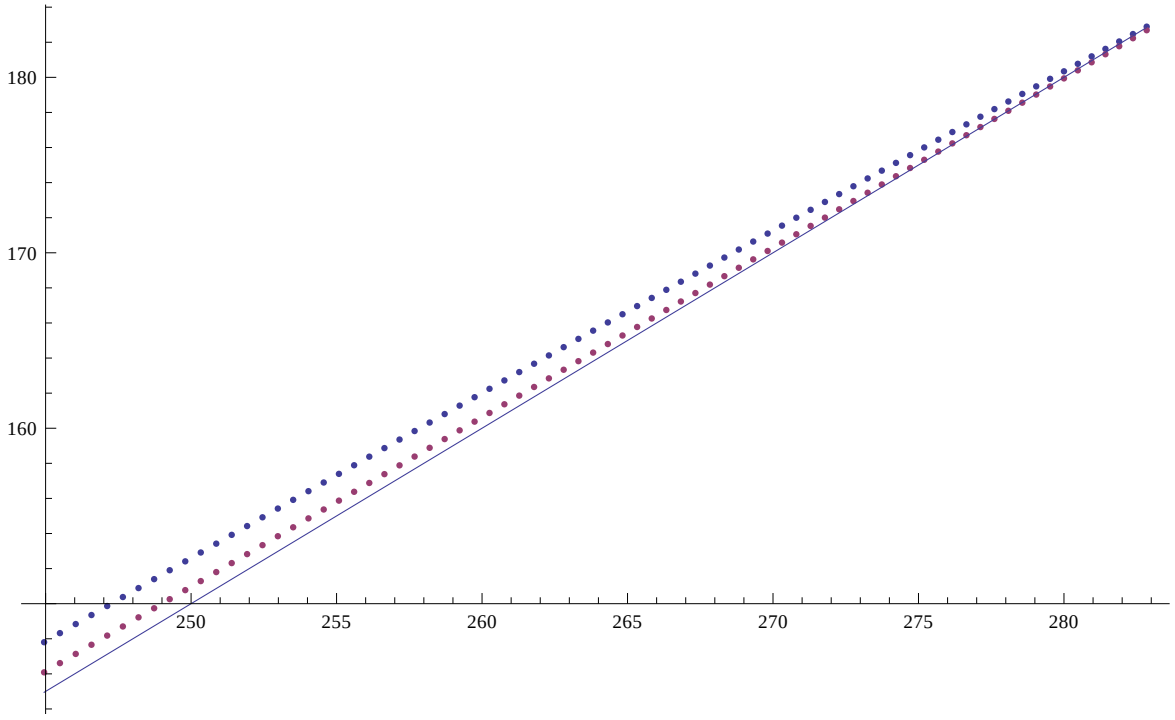
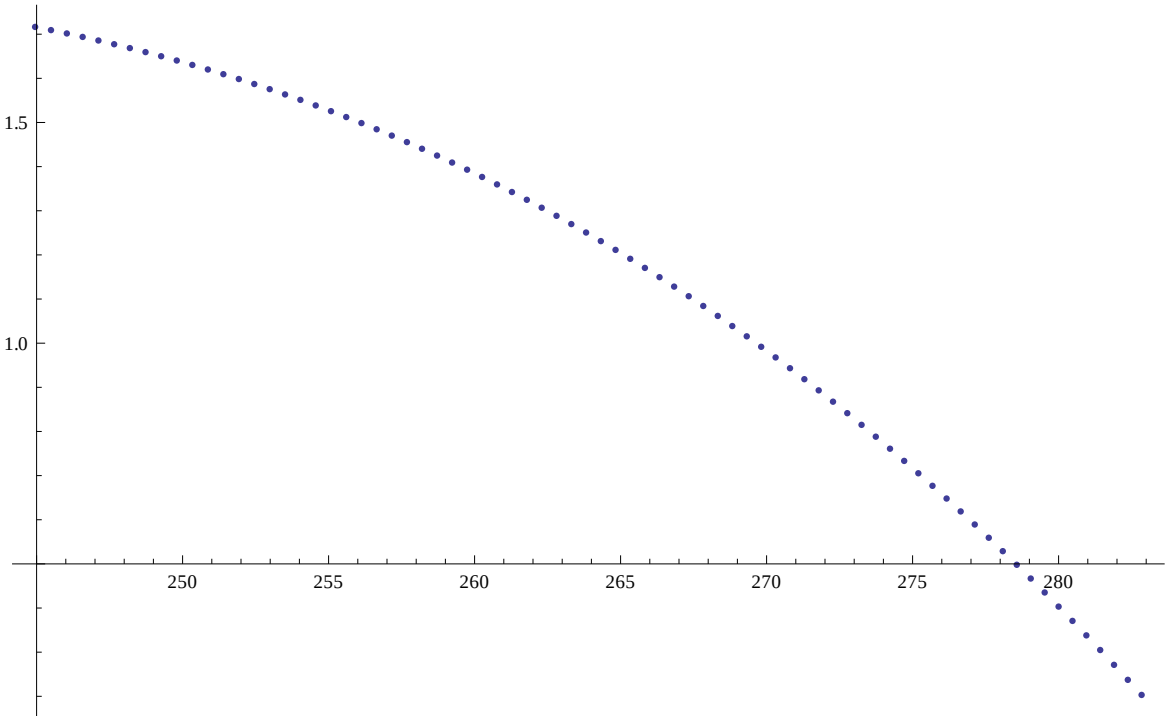
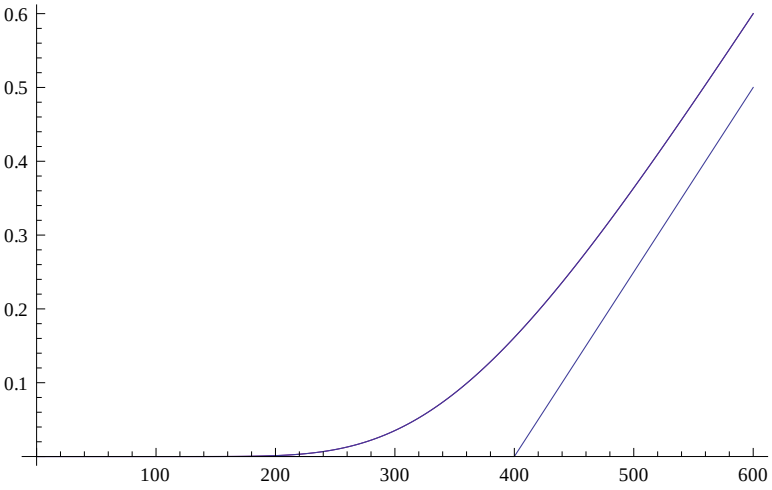
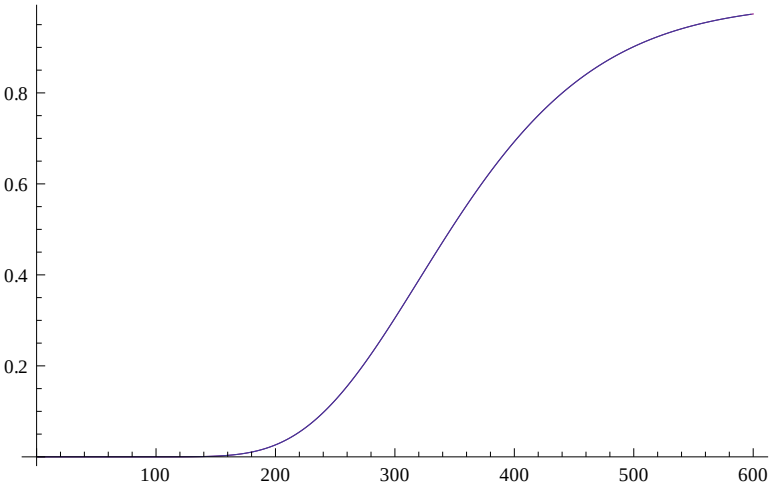
```
Exit[];

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

{σ, d} = IsometricGeometricAverageParameters[0.2, 0, 0.1, 2];
r = 0.05; T = 2; k = 100;
a = Import["D:\\Users\\Johannes\\Promotion\\SVN Rep\\Programmierung\\Tridiagonal
    Solver Tests\\output\\a.txt", "Table"];
nn = 3 Length[a] / 4;
a = a[[nn ;;]];
b = {#[[1]], BlackScholesCall[#[[1]], k, T, r, σ, d]} & /@ a;
Show[ListPlot[{a, b}, PlotRange → All],
 Plot[Max[x - k, 0], {x, Min[a[[ ;; , 1]]], Max[a[[ ;; , 1]]]}]]
ListPlot[Transpose[{a[[ ;; , 1]], (a[[ ;; , 2]] - b[[ ;; , 2]])}], PlotRange → All]
```

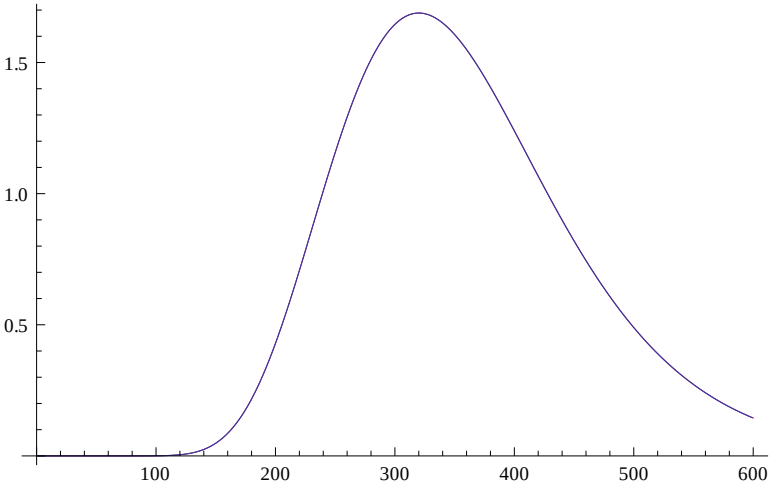


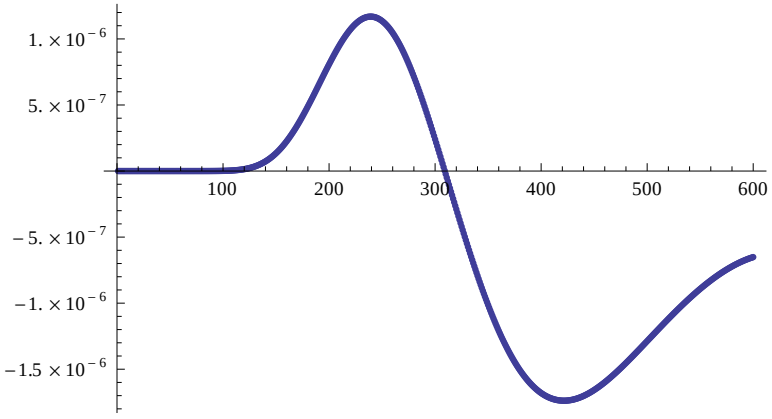


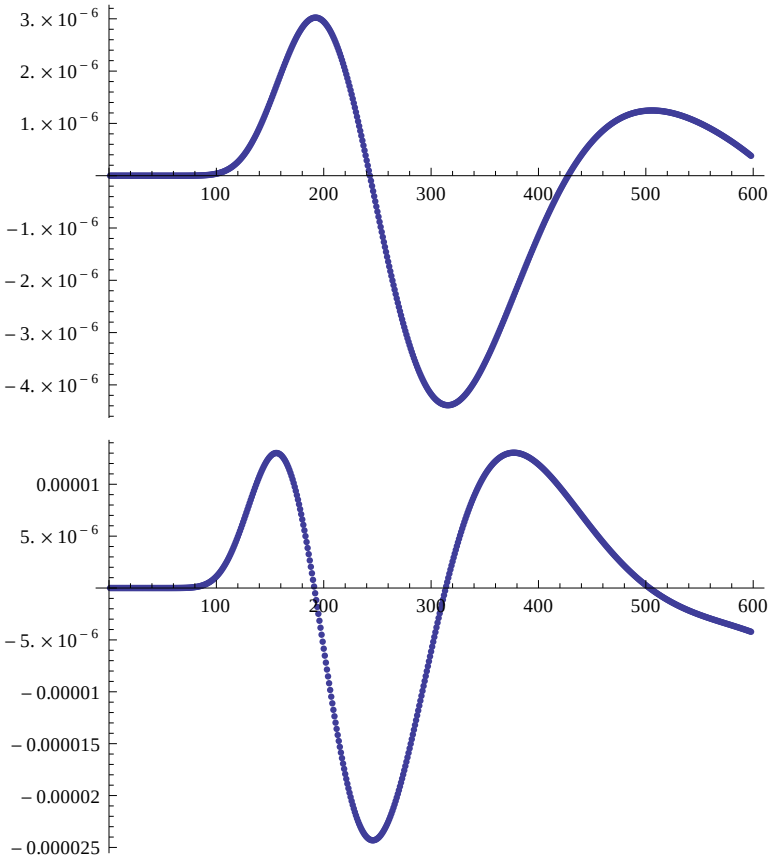

```
n = 2000; nn = Round[1.5 / 5 * n]; h = 5.0 / n;
b = Table[BlackScholesCall[j 5.0 / n, 1.0, 2.0, 0.05, 0.2, 0], {j, 1, nn}];
bS = Table[BlackScholesCallDelta[j 5.0 / n, 1.0, 2.0, 0.05, 0.2, 0], {j, 2, nn - 1}];
bSS = Table[BlackScholesCallGamma[j 5.0 / n, 1.0, 2.0, 0.05, 0.2, 0], {j, 2, nn - 1}];
Show[ListLinePlot[a[[ ;; nn]], PlotStyle → Purple],
 ListLinePlot[b], Plot[Max[x 5 / n - 1, 0], {x, 0, nn}]]
Show[ListLinePlot[CentralDifferences[a][[ ;; nn]] / h / 2, PlotStyle → Purple],
 ListLinePlot[bS]]
Show[ListLinePlot[Differences[a, 2][[ ;; nn]] / h ^ 2, PlotStyle → Purple],
 ListLinePlot[bSS]]
ListPlot[(a[[ ;; nn]] - b) / Norm[b], PlotRange → All]
ListPlot[(CentralDifferences[a][[ ;; nn - 2]] / h / 2 - bS) / Norm[bS], PlotRange → All]
ListPlot[(Differences[a, 2][[ ;; nn - 2]] / h ^ 2 - bSS) / Norm[bSS], PlotRange → All]
```




0.8
0.6
0.4
0.2
100
200
300
400
500
600


1.5
1.0
0.5
100
200
300
400
500
600


1. × 10^−6
5. × 10^−7
100
200
300
400
500
600
−5. × 10^−7
−1. × 10^−6
−1.5 × 10^−6


3. × 10^-6
2. × 10^-6
1. × 10^-6
100
200
300
400
500
600
-1. × 10^-6
-2. × 10^-6
-3. × 10^-6
-4. × 10^-6
0.00001
5. × 10^-6
100
200
300
400
500
600
-5. × 10^-6
-0.00001
-0.000015
-0.00002
-0.000025