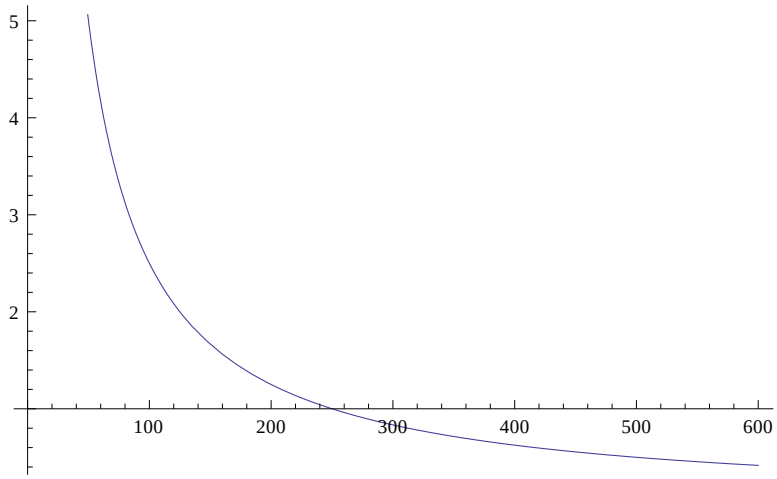
```
T = 1; t = .97; r = 0; μ = .01 + r; σ = .2; γ1 = .001; γ = γ1 Exp[-T r]; d = Exp[-(T - t) r];
S1 = 600; op[S_] := (μ - r)/(γ σ^2 S) d
zeroRemainder[S_] := (μ - r)/γ (T - t)/2 - Log[S]/σ^2
Plot[op[S], {S, 1, S1}]
Table[{S, op[S]}, {S, 1, S1, S1 / 500}] // MatrixForm // N;
-(μ - r)^2 (T - t)/(2 σ^2 γ) d
a = {54.040520140622995, 54.886134118350562};
op /@ a
zeroRemainder /@ a
```




```
-0.0375

{4.62616, 4.55488}

{-997.284, -1001.17}

u[p_, γ_] := 1/γ Log[p Exp[γ/p] + (1 - p) Exp[-γ/(1 - p)]]
```

```
Plot[u[.1, x], {x, .0001, 20}, PlotRange → All]
```