```
In[22]:= L = 5
Out[22]= 5

In[16]:= T = 240
Out[16]= 240

In[6]:= U = 1
Out[6]= 1

(* CP is 1/2 of base LP pool liquidity in millions of dollars *)

In[26]:= CP = 10
Out[26]= 10

In[27]:= Plot[Piecewise[{{CP * (T / (L * Abs[x]) + U) * (1 / Sqrt[1 - Abs[x]] - 1), x < 0},
         {CP * (T / (L * x) + U) * (Sqrt[1 + x] - 1), x > 0}}], {x, -1, 250}]
```
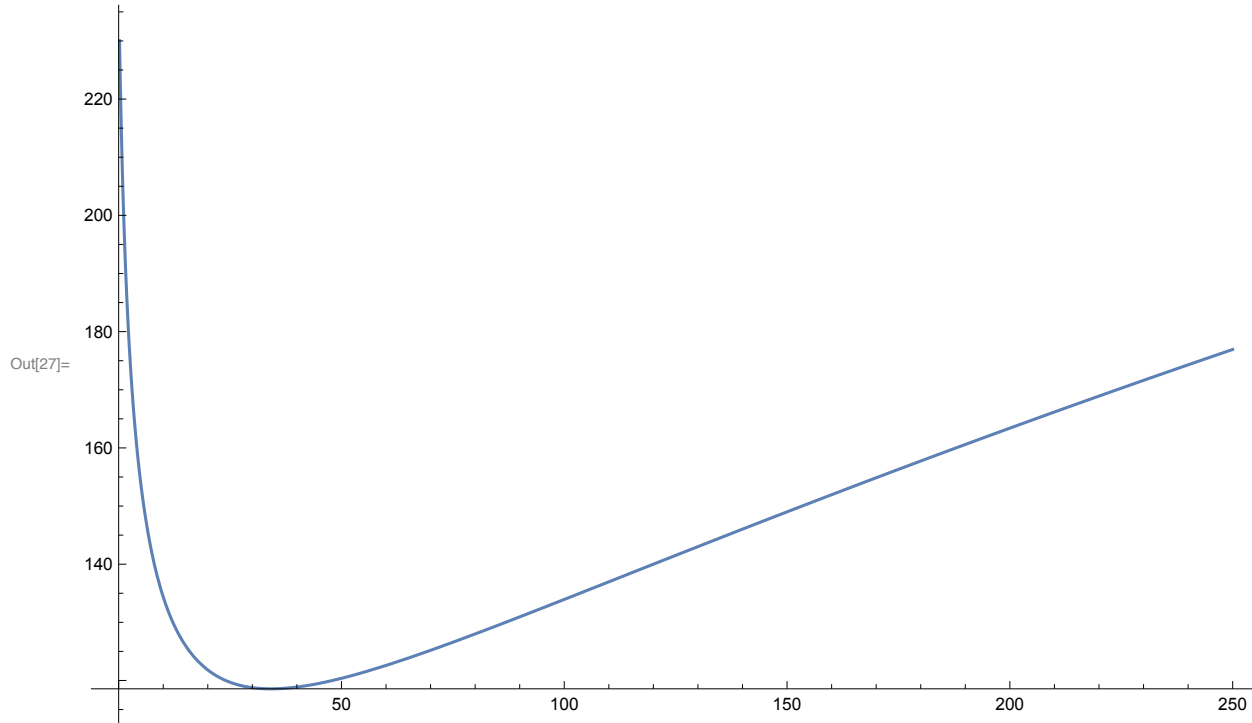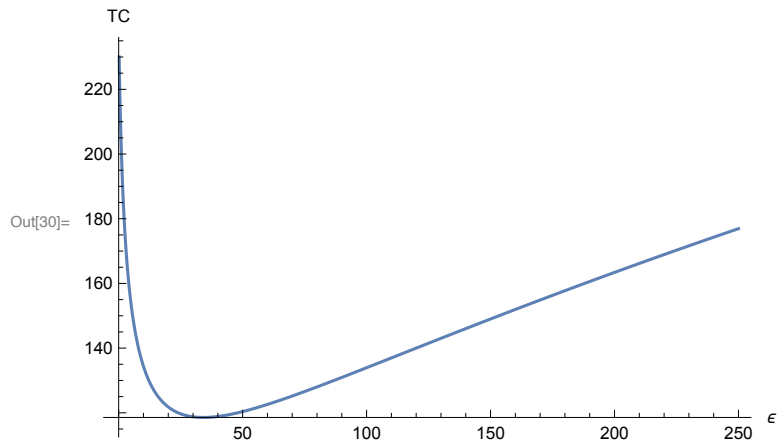


```
In[32]:= FindMinimum[CP * (T / (L * x) + U) * (Sqrt[1 + x] - 1), x]
Out[32]= {118.564, {x → 34.1436}}
```
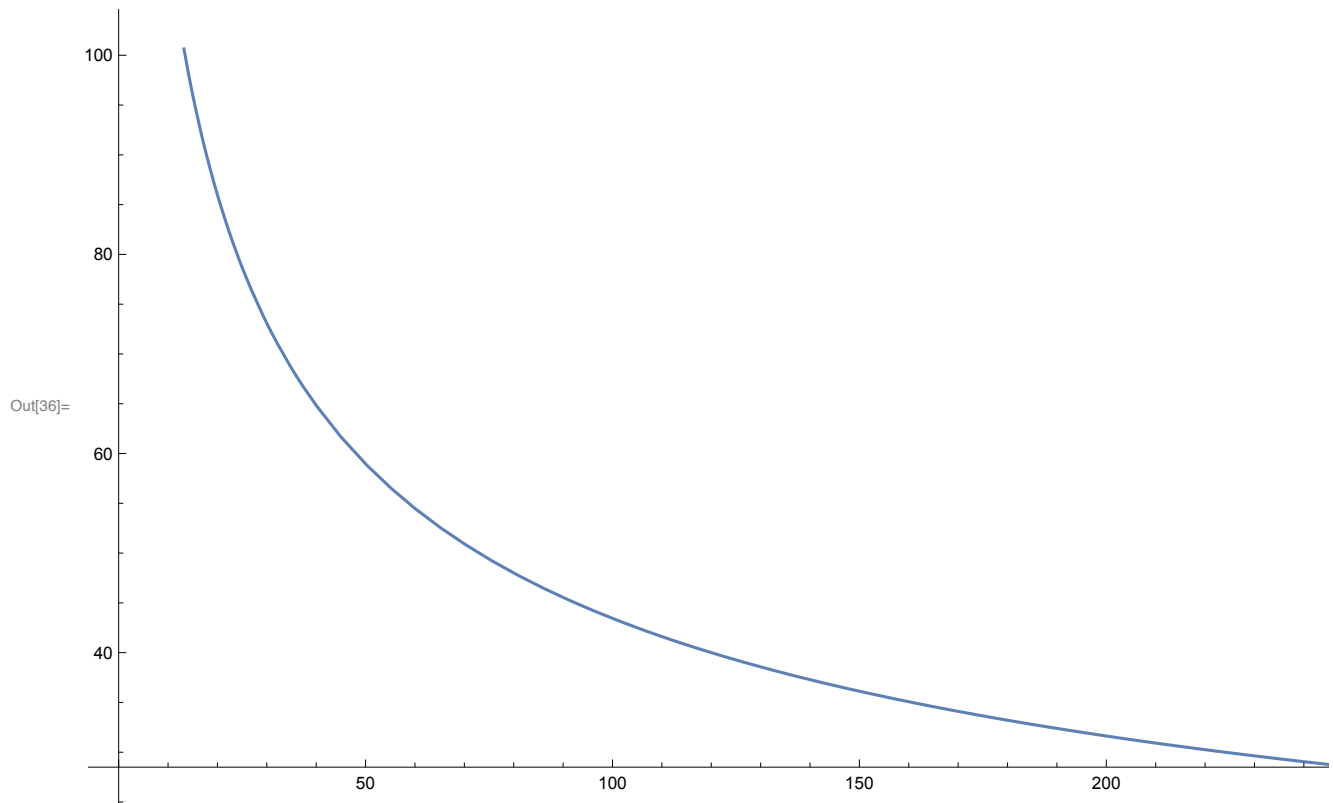
In[30]:= `Show[%27, AxesLabel → {HoldForm[ϵ], HoldForm[TC]},`
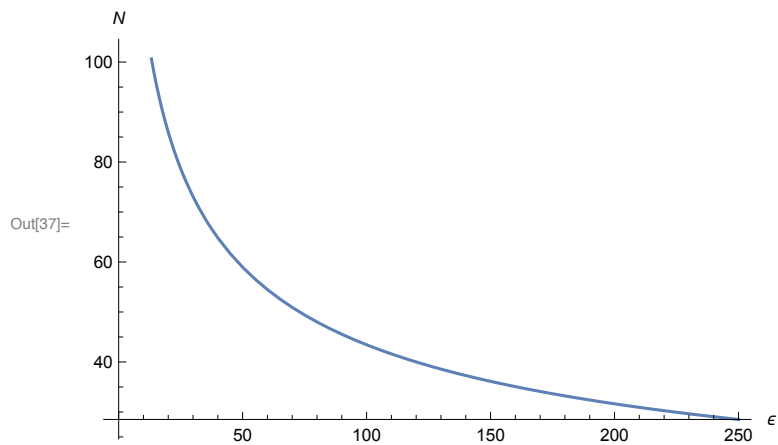`  PlotLabel → None, LabelStyle → {GrayLevel[0]}]`

Out[30]=

In[31]:= `Export["/Users/personal/Desktop/tc_10m.svg", %30, "SVG"]`

Out[31]= `/Users/personal/Desktop/tc_10m.svg`

In[36]:= `Plot[Piecewise[{{CP * (T / (L * Abs[x])) * (1 / Sqrt[1 - Abs[x]] - 1), x < 0},`
`  {CP * (T / (L * x)) * (Sqrt[1 + x] - 1), x > 0}}], {x, -1, 250}]`

Out[36]=

In[37]:= `Show[%36, AxesLabel → {HoldForm[ε], HoldForm[N]},`
`PlotLabel → None, LabelStyle → {GrayLevel[0]}]`

Out[37]=

In[35]:= `CP * (T / (L * 34.14359353944894`)) * (Sqrt[1 + 34.14359353944894`] - 1)`

Out[35]= `69.282`

`(* Caps on OI can be made s.t. N break-even in [35] is not possible *)`