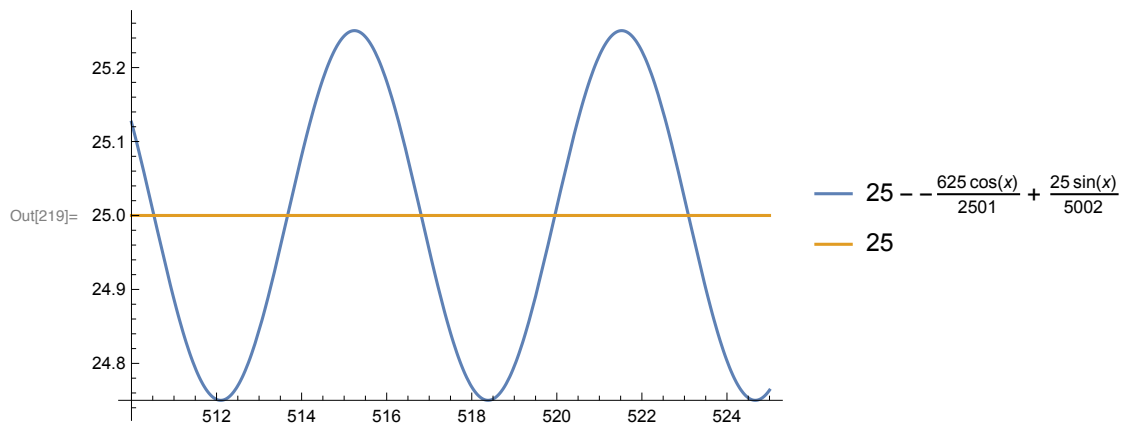


```
In[219]:= Plot[{ 25 - ((-625/2501) * Cos[x]) + ((25/5002) * Sin[x]), 25},
{x, 510, 525}, PlotLegends -> "Expressions"]
```



Q (t) = 25 - ((-625/2501) * Cos[t]) + ((25/5002) * Sin[t] + 63150/501 * e^(-t/50)), Recall the formula for find amplitude of the combinations (B sint + A cos t) is sqrt (A^2 + B^2), compared the previous functions, we get A = -625/2501, B = 25/5002, Amplitude = sqrt (A^2 + B^2), we get (25/5002) * sqrt (2501) = 0.24