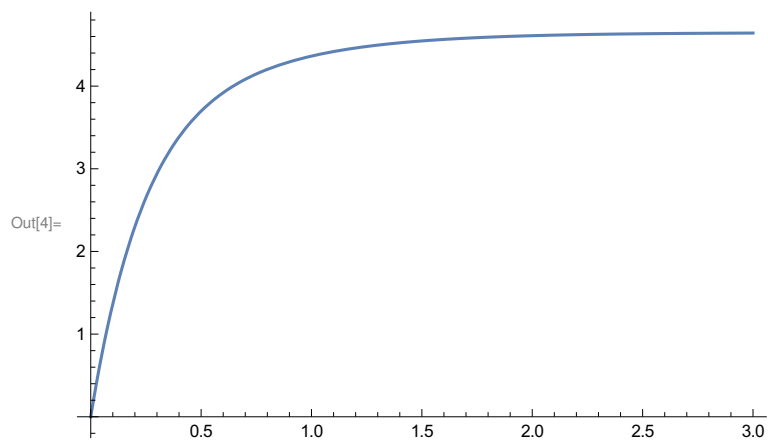


Problem 9.5.39-40

```
In[1]:= app[tau_] := NIntegrate[4 E^(-2 t) Sqrt[16 E^(-4 t) + 1], {t, 0, tau}]
```

```
In[4]:= Plot[app[tau], {tau, 0, 3}, AxesOrigin -> {0, 0}]
```



```
In[5]:= app[10]
```

Out[5]= 4.64678

```
In[6]:= app[11]
```

Out[6]= 4.64678

```
In[7]:= app[20]
```

Out[7]= 4.64678