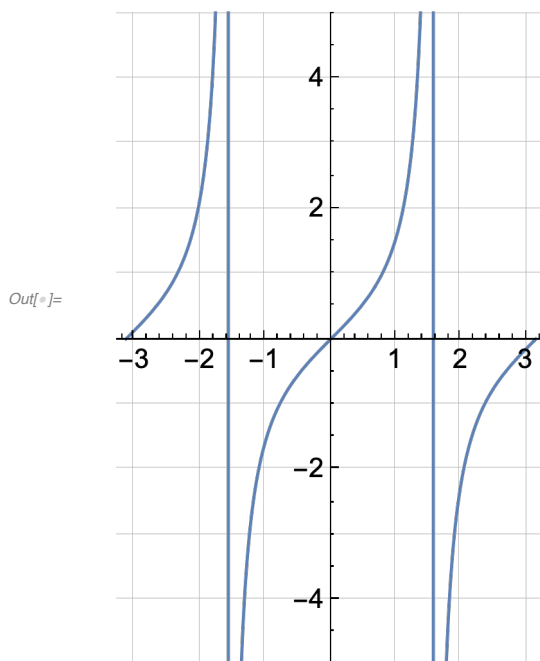


Section 2.4 - Derivatives of Other Trig Functions

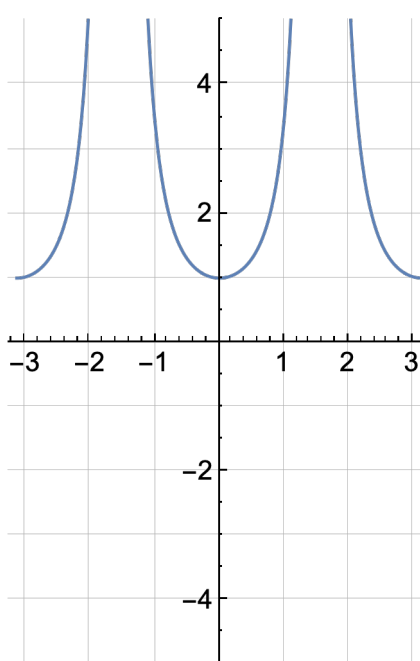
Given that $f(x)=\tan(x)$

```
In[*]:= f[x_] := Tan[x]  
f'[x]  
fp[x_] := Sec[x]^2  
Out[*]= Sec[x]^2
```

$y = \tan(x)$



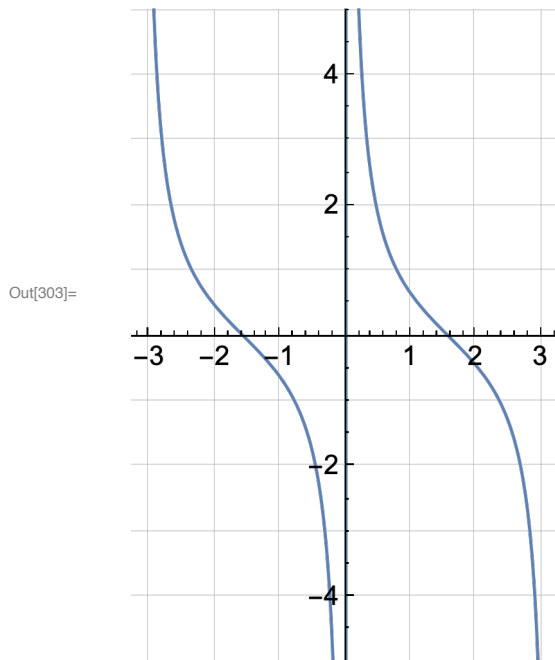
$y = \sec^2(x)$



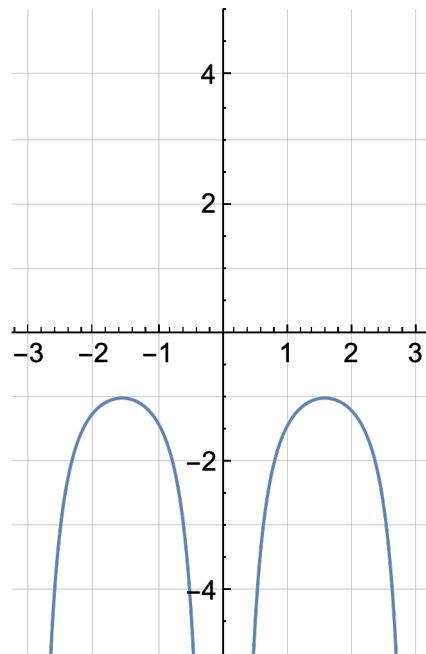
Given that $f(x)=\text{Cot}(x)$

```
In[300]:= f[x_] := Cot[x]  
          f'[x]  
          fp[x_] := -Csc[x]^2  
Out[301]= -Csc[x]^2
```

$y = \cot(x)$



$y = -\text{csc}^2(x)$

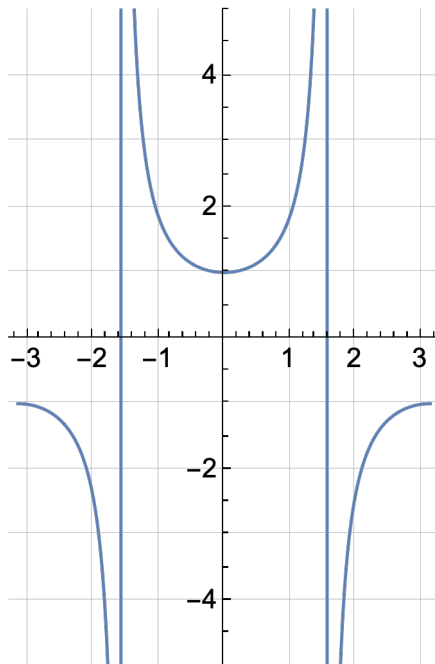


Given that $f(x)=\text{Sec}(x)$

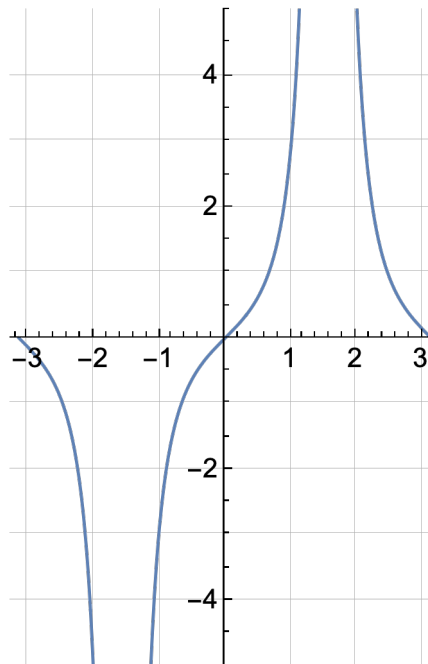
```
In[307]:= f[x_] := Sec[x]
          f'[x]
          fp[x_] := Sec[x] Tan[x]
```

```
Out[308]= Sec[x] Tan[x]
```

$y = \sec(x)$



$y = \sec(x) \tan(x)$

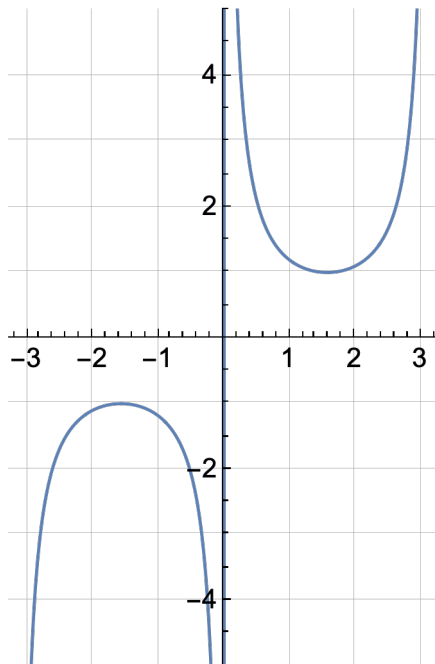


Given that $f(x)=\text{Csc}(x)$

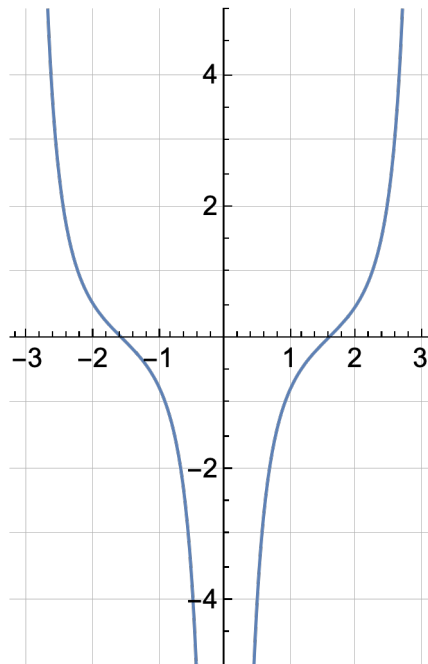
```
In[320]:= f[x_] := Csc[x]
          f'[x]
          fp[x_] := -Cot[x] Csc[x]
```

```
Out[321]= -Cot[x] Csc[x]
```

$y = \text{csc}(x)$



$y = -\cot(x) \text{csc}(x)$



Out[323]=