

(* Quiz 17 *)

In[36]:= **f[x_] := 2 x - Tan[x];**

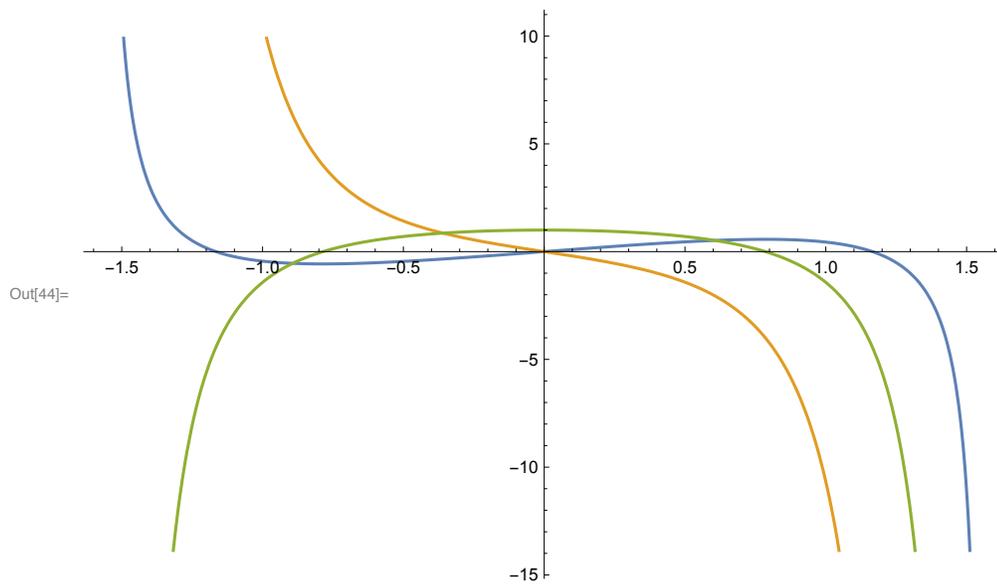
In[37]:= **Simplify[f'[x]]**

Out[37]= $2 - \text{Sec}[x]^2$

In[38]:= **Simplify[f''[x]]**

Out[38]= $-2 \text{Sec}[x]^2 \text{Tan}[x]$

In[44]:= **Plot[{f[x], f''[x], f'[x]}, {x, -Pi/2, Pi/2}]**



In[40]:= **g[x_] := Sec[x] + Tan[x];**

In[41]:= **Simplify[g'[x]]**

Out[41]= $\text{Sec}[x] (\text{Sec}[x] + \text{Tan}[x])$

In[42]:= **Simplify[g''[x]]**

Out[42]= $\text{Sec}[x] (\text{Sec}[x] + \text{Tan}[x])^2$

In[43]:= **Plot**[{**g**[**x**], **g**'[**x**], **g**''[**x**]}, {**x**, 0, **Pi** / 2}]

