Taking the derivative of a function

Let $f(x) = (\exp(x+1)) + (\tan((2*x)+1))$

Next, we will take the derivative $f_x^{'}(x)$:

Step-by-step solution:
$(f+g)^{'} = f^{'} + g^{'} : \tan^{'} x = 1/\cos^2 x : (f+g)^{'} = f^{'} + g^{'} : (f*g)^{'} = f^{'}g + g^{'}f :\Rightarrow ((0*x)+(1*2))$
$\Rightarrow (((0*x)+(1*2))+0)$
$\Rightarrow ((1/((\cos((2*x)+1))^2))*(((0*x)+(1*2))+0))$
$\exp x)^{'} = \exp x : (f+g)^{'} = f^{'} + g^{'} :\Rightarrow (1+0)$
$\Rightarrow ((\exp(x+1))*(1+0))$
$\Rightarrow (((\exp(x+1))*(1+0))+((1/((\cos((2*x)+1))^2))*(((0*x)+(1*2))+0)))$

The derivative is:
$((\exp(x+1))*(1+0))+((1/((\cos((2*x)+1))^2))*(((0*x)+(1*2))+0))$

But you can see many unnecessary actions.
Let us make some simplifications:
$((\exp(x+1))*1)+((1/((\cos((2*x)+1))^2))*(((0*x)+(1*2))+0))$
$((\exp(x+1))*1)+((1/((\cos((2*x)+1))^2))*(((0*x)+2)+0))$
$(\exp(x+1))+((1/((\cos((2*x)+1))^2))*(((0*x)+2)+0))$
$(\exp(x+1))+((1/((\cos((2*x)+1))^2))*((0*x)+2))$
$(\exp(x+1))+((1/((\cos((2*x)+1))^2))*(0+2))$
$(\exp(x+1))+((1/((\cos((2*x)+1))^2))*2)$
$(\exp(x+1))+((1/((\cos((2*x)+1))^2))*2)$

In this way:
$\boxed{f_x^{'}(x) = (\exp(x+1))+((1/((\cos((2*x)+1))^2))*2)}$

Further simplifications reader can hold their own.