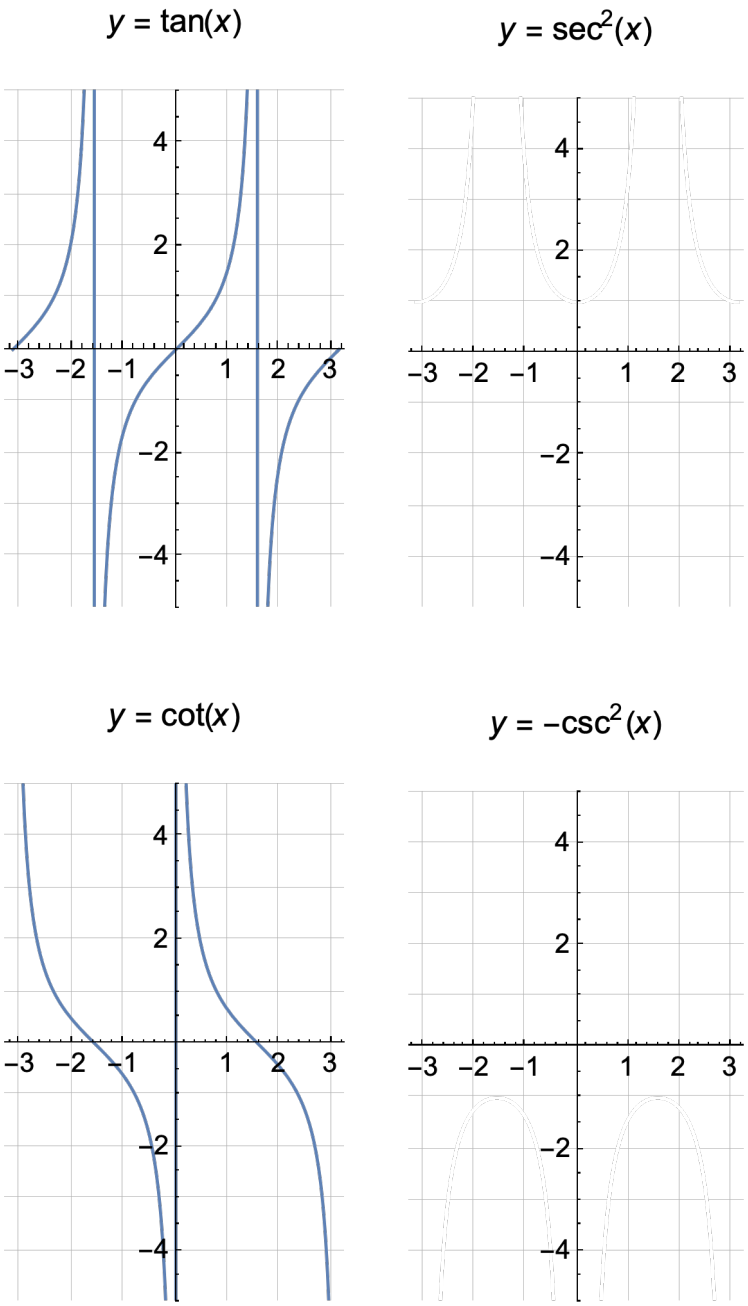
Section 2.4 - Derivatives of Other Trig Functions

1. Given that
    a. f(x)=Tan(x): demonstrate that its derivative is $Sec^2(x)$
    b. g(x)=Cot(x): demonstrate that its derivative is $-Csc^2(x)$
    c. Graph both on the Cartesian planes below
    d. Explain how the functions f and g are related, as well as their derivatives.

Out[116]=



2. Given that

a. f(x)=Sec(x): demonstrate that its derivative is Sec(x)Tan(x)

b. g(x)=Csc(x): demonstrate that its derivative is –Csc(x)Cot(x)

c. Graph both on the Cartesian planes below

d. Explain how the functions f and g are related, as well as their derivatives.

In[125]:=

Out[126]=