Quotient Rule

1. $\dfrac{d}{dx}\left(\dfrac{\cos x}{5^x}\right)$

2. $\dfrac{d}{dx}\left(\dfrac{\ln x}{\sec x}\right)$

3. $\dfrac{d}{dx}\left(\dfrac{\tan x}{3x^2-1}\right)$

4. What is the instantaneous rate of change at $x = 3$ of the function $f(x) = \dfrac{2x^3-4x+1}{2x-1}$?

5. Find an equation of the line normal to the graph of $y = \dfrac{3x-2}{2x+3}$ at point $(1, 5)$.