Higher order derivatives

3.5.1 Calculate the derivatives indicated:

(a) $g''(1)$ for $g(x) = \dfrac{x}{x+1}$,

(b) y''' for $y = x^{-9/5}$.

(c) $f^{(2016)}(2016)$ for $f(x) = (1-x)^{2016}$. You may use the factorial notation $n! = 1 \cdot 2 \cdot 3 \cdot \ldots \cdot n$ for a positive integer n.