examples:

Find the derivatives of these functions. (Answer with a sentence.)

1. $f(x) = \sin^3(\cos(x)) = (\sin(\cos(x)))^3$

$f'(x) = 3(\sin(\cos(x)))^2 \frac{d}{dx}[\sin(\cos(x))] = 3\sin^2(\cos(x))\left(\cos(\cos(x))\frac{d}{dx}[\cos(x)]\right)$

$= 3\sin^2(\cos(x)) \cdot \cos(\cos(x))(-\sin(x))$

$= \boxed{-3\sin^2(\cos(x))\cos(\cos(x))\sin(x)}$

2. $f(x) = \sin(x^3)$

$\boxed{f'(x) = \cos(x^3) \cdot 3x^2}$

3. $f(x) = \exp\left(\frac{x}{1+x^2}\right)$, $f'(x) = e^{\frac{x}{1+x^2}} \frac{d}{dx}\left[\frac{x}{1+x^2}\right] = e^{\frac{x}{1+x^2}} \cdot \frac{1(1+x^2) - x(2x)}{(1+x^2)^2} = \boxed{e^{\frac{x}{1+x^2}} \frac{1-x^2}{(1+x^2)^2}}$