NO.
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(22) $f(x) = \frac{\cot x}{1-\sin x}$

let $u = \cot x$ $\quad v = 1-\sin x$

$du = -\csc^2 x$ $\quad dv = -\cos x$

$f'(x) = \frac{v\,du - u\,dv}{v^2}$

$= \frac{(1-\sin x)(-\csc^2 x) - (\cot x)(-\cos x)}{(1-\sin x)^2}$

$= \frac{-\csc^2 x + \sin x \csc^2 x + \cot x \cos x}{(1-\sin x)^2}$ ▷ distribute $(-\csc^2 x)$ to $(1-\sin x)$

$= \frac{-\csc^2 x + \sin x\left(\frac{1}{\sin^2 x}\right) + \cot x \cos x}{(1-\sin x)^2}$ ▷ $\csc x = \frac{1}{\sin x}$

$f'(x) = \frac{-\csc^2 x + \csc x + \cot x \cos x}{(1-\sin x)^2}$

(23) $f(x) = \left(\frac{1+\sin x}{1-\sin x}\right)$

let $u = 1+\sin x$ $\quad v = 1-\sin x$

$du = \cos x$ $\quad dv = -\cos x$

$f'(x) = \frac{(1-\sin x)(\cos x) - (1+\sin x)(-\cos x)}{(1-\sin x)^2}$ ▷ $f'(x) = \frac{v\,du - u\,dv}{v^2}$

$= \frac{\cos x - \sin x \cos x + \cos x + \sin x \cos x}{(1-\sin x)^2}$

$f'(x) = \frac{2\cos x}{(1-\sin x)^2}$ //

(24) $f(x) = \left(\frac{\sin x - 1}{\cos x + 1}\right)$

let $u = \sin x - 1$ $\quad v = \cos x + 1$

$du = \cos x$ $\quad dv = -\sin x$

$f'(x) = \frac{(\cos x+1)(\cos x) - (\sin x - 1)(-\sin x)}{(\cos x+1)^2}$ ▷ $\frac{v\,du - u\,dv}{v^2}$

$= \frac{\cos^2 x + \cos x + \sin^2 x - \sin x}{(\cos x+1)^2}$

but $\cos^2 x + \sin^2 x = 1$

$f'(x) = \frac{1 + \cos x - \sin x}{(\cos x+1)^2}$ //

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(25) $f(x) = (x - \sin x)(x + \cos x)$

let $u = x - \sin x$ $\quad v = x + \cos x$

$du = -\cos x$ $\quad dv = -\sin x$

$f'(x) = (x - \sin x)(-\sin x) + (x + \cos x)(-\cos x)$ ▷ $u\,dv + v\,du$

$= -x\sin x + \sin^2 x - x\cos x + \cos^2 x$

but $\sin^2 x + \cos^2 x$

$= 1 - x\sin x - x\cos x$

$f'(x) = 1 - x(\sin x + \cos x)$ //

(26) $f(x) = (x^2 + \cos x)(2x - \sin x)$

let $u = x^2 + \cos x$ $\quad v = 2x - \sin x$

$du = 2x - \sin x$ $\quad dv = 2 - \cos x$

$f'(x) = u\,dv + v\,du$

$= (x^2 + \cos x)(2 - \cos x) + (2x - \sin x)(2x - \sin x)$

$f'(x) = (x^2 + \cos x)(2 - \cos x) + (2x - \sin x)$ //

(27) $f(x) = \left(\frac{2\csc x - 1}{\csc x + 2}\right)$

let $u = 2\csc x - 1$ $\quad v = \csc x + 2$

$du = -2\csc x \cot x$ $\quad dv = -\csc x \cot x$

$f'(x) = \frac{(\csc x + 2)(-2\csc x \cot x) - (2\csc x - 1)(-\csc x \cot x)}{(\csc x + 2)^2}$

$= \frac{-2\csc^2 x \cot x - 4\csc x \cot x + 2\csc^2 x \cot x - \csc x \cot x}{(\csc x + 2)^2}$

$f'(x) = \frac{-5\csc x \cot x}{(\csc x + 2)^2}$ //

(28) $f(x) = \left(\frac{\tan y + 1}{\tan y - 1}\right)$

let $u = \tan y + 1$ $\quad v = \tan y - 1$

$du = \sec^2 y$ $\quad dv = \sec^2 y$

$f'(x) = \frac{(\tan y - 1)(\sec^2 y) - (\tan y + 1)(\sec^2 y)}{(\tan y - 1)^2}$ ▷ $\frac{v\,du - u\,dv}{v^2}$

$= \frac{\sec^2 y\,[(\tan y - 1) - (\tan y + 1)]}{(\tan y - 1)^2}$ * factor out $\sec^2 y$

$f'(x) = -2\sec^2 y$