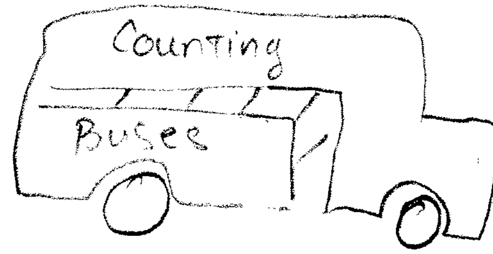

Class #6

$$f(x) = \cos(\sqrt{x^2+1})$$

$$\Rightarrow f(x) = \cos(x^2+1)^{1/2}$$

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

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

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

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

$$f'(x) = (x^3+x)(-\sin(x^2+1)^{1/2})$$

$$f'(x) = -\sin(x^2+1)^{1/2}(x^3+x).$$

D 6 K

$y = \sin(4\tan(\sin(x)))$

$y' = \cos(4\tan\sin(x))) \frac{d}{dx} 4\tan(\sin x)$

$y' = \cos(4\tan\sin(x))) \cdot 4\sec^2(\sin(x)) \cdot \frac{d}{dx}\sin(x)$

$y' = \cos(4\tan\sin(x))) \cdot 4\sin^2(\sin(x) \cdot \cos(x)$

Double Helix - Composites

$y = \sin(\tan(\sec(r)))$

$y' = \cos(\tan(\sec(r))) \cdot \frac{d}{dr}\tan(\sec(r))$

$y' = \cos(\tan(\sec(r))) \cdot \sec^2(\sec(r)) \cdot \frac{d}{dr}\sec(r)$

$y' = \cos(\tan(\sec(r))) \cdot \sec^2(\sec(r)) \cdot \sec(r)\tan(r)$

when the variable is not 'x' make sure your d/dx changes accordingly.

Deutsche Produktion - DP

$y = \sec(x^{10} - 3x^4 + 2x)$

$y' = \sec(x^{10} - 3x^4 + 2x)\tan(x^{10} - 3x^4 + 2x)$
$\cdot \frac{d}{dx}(x^{10} - 3x^4 + 2x)$

$y' = \sec(x^{10} - 3x^4 + 2x)\tan(x^{10} - 3x^4 + 2x)$
$\cdot (10x^9 - 12x^3 + 2)$

Investment Bankers

February 14, 2011

- Steve Bruns
- Maiko Arana
- Luis Cinoro

Luis = e^x , Maiko = Tan(2x) , Steve = Cos(x)

$y =$ Luis (Maiko (Steve))

$y = e^{\wedge}(\tan(2\cos(x)))$

$y' = e^{\wedge}(\tan(2\cos(x))) \cdot \frac{d}{dx} \tan(2\cos(x))$

$y' = e^{\wedge}(\tan(2\cos(x))) \cdot \sec^2(2\cos(x)) \cdot \frac{d}{dx}(2\cos(x))$

$y' = e^{\wedge}(\tan(2\cos(x))) \cdot \sec^2(2\cos x) \cdot (-2\sin x)$

I.T.

$$y = \sin(\cos(\tan x))$$

$\sin \to \cos(\cos(\tan x)$

$\cos \to -\sin(\tan x)$

$\tan \to \sec^2 x$

$$y' = \cos(\cos(\tan x)) \cdot (-\sin(\tan x)) \cdot \sec^2 x$$

Patrick Wells

Ted CONDO

Grayson Rogers

MAT FINISHER Hiroaki Tomida

Mo Sley

$$~~y = \sin(2x)\tan(9x)\sin(4x)~~$$

$$~~y' = \frac{d}{dx}\sin 2x\,(\tan(9x)\sin(4x))~~$$

$$~~y' = 2\cos 2x\,\sec^2(9x)\sin(4x)\cdot\frac{d}{dx}(\sin 4x)~~$$

$$~~y' =~~$$

$$y = \sin(\tan(\sin(x)))$$

$$y' = \cos(\tan(\sin(x)))\cdot\frac{d}{dx}\tan(\sin(x))$$

$$= \cos(\tan(\sin(x)))\sec^2(\sin x)\cdot\frac{d}{dx}(\sin x)(\cos x)$$

PURPLE PARROTS

$\tan x \circ \cos 2x \circ \sin x$

$\tan(\cos 2(\sin x))$

$\sec^2(\cos 2(\sin x))(-\sin 2(\sin x)) \cdot 2 \cdot \cos x$

$-2\sec^2(\cos 2(\sin x))(\sin 2(\sin x))\cos x$

XMAS
IN
JULY.

$$y = \sin(5\cos(\ln x))$$

$$y' = \cos(5\cos(\ln x))\frac{d}{dx}5\cos(\ln x)$$

$$= \cos(5\cos(\ln x)) \cdot 5\sin(\ln x) \cdot \frac{d}{dx}\ln x$$

$$= \cos(5\cos(\ln x)) \cdot 5\sin(\ln x) \cdot \frac{1}{x}$$

Abraham Sherman

Timothy Lukowicz

Feb 14, 2011

Bios

$y = \sin(\cos(x)$

$y' = \cos(\cos(x) \cdot \frac{d}{dx} \cos(x)$

$y' = \cos((\cos(x))) \cdot (-\sin(x))$