CALCULUS Derivatives of trigonometric functions NEVV

0360-1. Differentiate $f(x) = ex^9 + 4 \tan x$.

0360-2. Differentiate
$$u(t) = -(\sin(6))t^8 + 6e^t + e^2 - \csc t$$
.

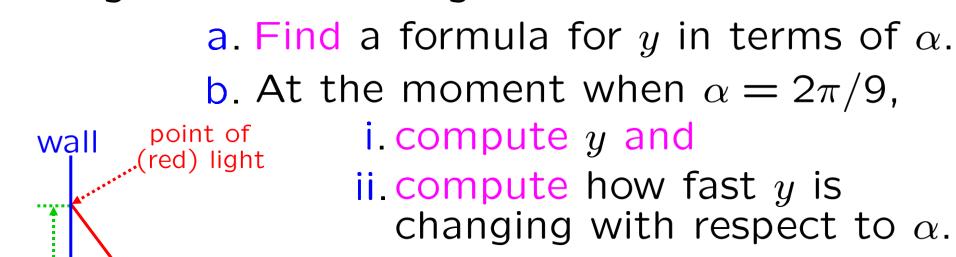
0360-3. Differentiate $p(t) = t^3 \sec t$.

0360-4. Differentiate
$$Q(s) = \frac{-\pi e^5 - \sec s}{(\csc s)(\cot s)}$$
.

0360-5. Differentiate
$$F(x) = \frac{x^2 e^x - \cos x}{e^x \tan x}$$
.

0360-6. Find an equation of the tangent line to the graph of $y=\frac{6e^{-\pi/2}e^x-\cos x}{2e^{-\pi/2}e^x\csc x}$ at the point $(\pi/2,3)$.

0360-7. A laser pointer, resting on the ground, is casting red light on a blue wall that is 18 ft away, as in the diagram. It is being turned upward, and its angle with the ground is denoted α (radians). Let y denote the distance from the point of light on the wall straight down to the ground.



laser pointer

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