Lista J

Slide 20:

2) $f(x) = \sqrt{x} \operatorname{sen} x$

fin = 1/2, senx = f'n = (6.x/2, senx) + x/3. colx =

= 1 (x) = 370 + 1/27.cox

3) f(x) = senx + 2 cotg x

('(x) = cosx - cossec2 X

4) $y = 2 \sec x - \cos x$

y'= 2 secx.tgx - (-correcx.cotex)

 $5)q(t)=t^3\cos t$

91(+)=3+2, cost + +3. -sent

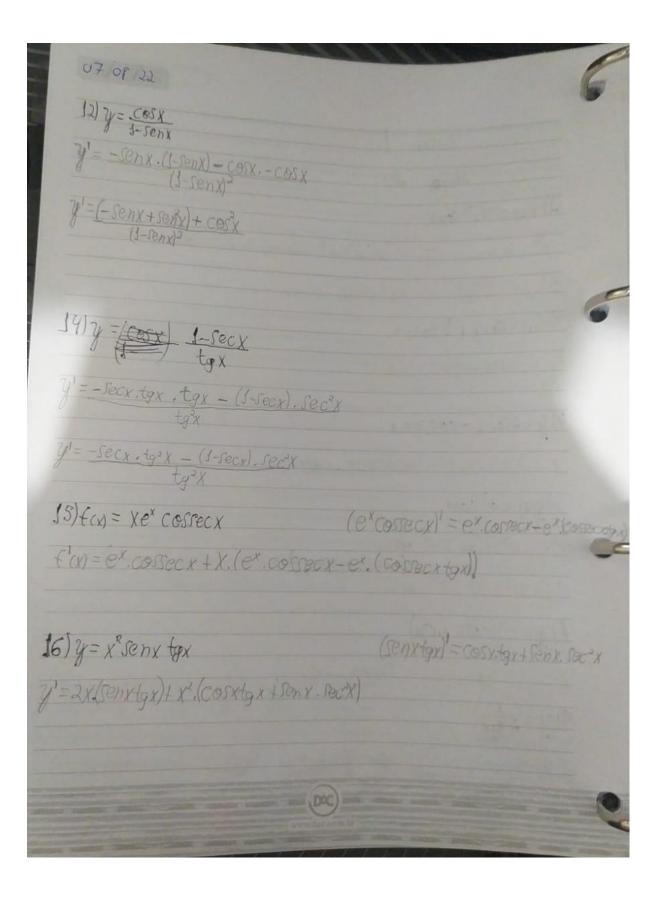
9/H = 3+3. cost - +3 sent

8) y = eu(cosu + cu)

 $y' = e^{u}.(\cos u + cu) + e^{u}.(\sin u + c)$

9) $y = \frac{x}{2 + 4x}$

 $y' = (2 + tgx) - x.(-sec^2x)$ $\Rightarrow y' = 2 + tgx + xsec^2x$



Scide 21:

39) $y = (2x+1)^{5}(x^{4}-3)^{6}$

 $\ln 3 = \ln ((2x+1)^5 (x^4-3)^6) \Rightarrow \ln y = 5. \ln (2x+1) + 6 \ln (x^4-3) \Rightarrow y = (2x+1)^5 (x^4-3)^6 (\frac{10}{544} + \frac{24x^2}{x^4-3}) \Rightarrow y' = (2x+1)^6 (x^4-3)^6 (\frac{10}{544} + \frac{24x^2}{x^4-3}) \Rightarrow y' = (2x+1)^6 (x^4-3)^6 (x$

 $41) y = \sqrt{\frac{x-1}{x^4+1}}$ $\ln y = \ln(\frac{x-1}{x^4})^{\frac{1}{2}}$ $\ln y = \ln(\frac{$

Iny = lntg x/ + lny = x. ln(tgx) + = x2. ln(tgx) + x. tox. Sec x

50) y=((nx) cosx

lny = ln(ln(x) = D lny = cosx. ln(ln(x) =

= -Senx, ln(ln(x)) + COSX. onx. x = = -senx, ln(lnx) + cosx =

 $\neq y = (\ln x)^{\cos x} \cdot (-\operatorname{Sen} x \cdot \ln(\ln x) + \frac{\cos x}{x \ln x})$