Curso: 6º3ª

Alumno: Dal Degan Santiago

1- $Y = sen^3(cos(5x))$

$Y' = 3 * sen^2 * (cos(5x)) * cos(cos(5x)) * (-sen(5x)) * 5$

$Y' = 15 * sen^2 * (cos(5x)) * cos(cos(5x)) * (-sen(5x))$

2- $Y = sec^2(\sqrt{x}) = cos^{-2}(\sqrt{x})$

$Y' = -2 * cos^{-3} * (-sen\sqrt{x}) * \frac{1}{2\sqrt{x}} * 1$

$Y' = \frac{sen\sqrt{x}}{cos^3\sqrt{x} * \sqrt{x}}$

3- $Y = +g^{-1}(x^3 - 5x + 4)$

$Y' = -1 * +g^{-2}(x^3 - 5x + 4) * (1 + +g^2(x^3 - 5x + 4)) * (3x^2 - 5)$

$Y' = \frac{-(1 + +g^2(x^3 - 5x + 4)) * (3x^2 - 5)}{+g^2 * (x^3 - 5x + 4)}$

4- $Y = \left(\frac{3x^2+6x}{x^3-4}\right)^5$

$Y' = 5\left(\frac{3x^2 + 6x}{x^3 - 4}\right)^4 * \left(\frac{(((2 * 3x) + 6x) * (x^3 - 4)) - (3x^2 + 6x) * (3x^2))}{(x^3 - 4)^2}\right)$

5- $Y = \sqrt{sen^{-1}(3x)} = (sen(3x)^{-\frac{1}{2}}$

$Y' = -\frac{1}{2}(sen3x)^{-\frac{3}{2}} * cos3x * 3$

6- $Y = e^{x*lnx} * 2^{-x}$

$Y' = e^{x*lnx} * (lnx + 1) * 2^{-x} - e^{x*lnx} * 2^{-x} * ln2$

7- $Y = log2 * \sqrt[3]{\frac{3-x}{x+3}}$

$Y' = \sqrt[3]{\frac{3 - x}{x + 3}} * \log_2 e * \frac{1}{3\sqrt[3]{\left(\frac{3 - x}{x + 3}\right)^2}} * \frac{-1 * (x + 3) - (3 - x) * 1}{(x + 3)^2}$

$Y' = -\frac{2 \log_2 e}{9 - x^2}$

8- $Y = sen^3(cos(5x))$

$Y' = 15 * sen^2 * (cos(5x)) * cos(cos(5x)) * (-sen(5x))$