1. If $x^3 + y^3 = 4xy$, find $\frac{dy}{dx}$. Then equation of the tangent line to the $x^3 + y^3 = 4xy$ at the point (2,2).(**4 points.**)

2. Find the following derivatives (**2 points each.**)

   (a) $f(x) = (x^5 + 4x^2 + 3)^5$

   (b) $g(x) = ln(secx)$

   (c) $e^{(sin2x)}$