QUIZ 4

1. By using substitution, compute the following indefinite integrals and for each of them check that what you have done is correct by taking the derivative.

    (a)
    $$F(x) = \int \cos(\sin(x)) \cos(x) dx$$

    (b)
    $$F(x) = \int \frac{2x}{\sqrt{x^2 + 1}} dx$$

    (c)
    $$F(x) = \int e^{\arctan(x)} \frac{1}{1 + x^2} dx$$