In class work **5** has questions **1** through **2** with a total of **10** points. Turn in your work at the end of class *on paper*. This assignment is due *Thursday 8 Febuary 13:20*.

1. Find a formula for F' given

(a) 
$$F(x) = \ln(x^2 + 1)$$

(b) 
$$F(x) = x \ln(x^2 + 1)$$

(c) 
$$F(x) = \frac{\ln(1+x) - \ln(1-x)}{2}$$

- 2. Find the numerical values of the definite integrals
- 2 (a)  $\int_0^1 \frac{x}{1+x^2} dx$

2 (b)  $\int_{-4}^{-2} \frac{1}{x+10} dx$