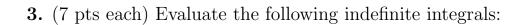
MACT 132 Spring 2011

2. (8 pts each) Differentiate the following functions:

a)
$$f(x)=sqrt(9-x^{(2)})+3sin^{(-1)}((x)/(3))$$

$$b)$$
f(x)=sinh(tan^(-1)e^(2x))



a)intx^(2)cos xdx

b)int(1+tanh x)/(cosh^(2)x)dx

 $_{\mathrm{C}})$ int(dx)/(sqrt(4x-x^(2)))

MACT 132 Spring 2011

4. (10 pts each) Evaluate the following definite integrals:

a)int_(1)^(e^(2))x In sqrtxdx

 $_{\rm b}) {\rm int_(0)^{\!\!\!\!/}((pi)/(4))} (\sin^{\!\!\!\!\!/}(3)x)/({\rm sqrt}(\cos x)) {\rm d}x$