

Name:

ID:

SR:

---

**Question1:** Find the linearization  $L(x)$  of the function  $f(x) = \ln(e + \tan x)$  at  $a = 0$ .

**Question2:** if  $f(x) = \frac{1+\tanh(x)}{1-\tanh(x)}$ , find  $f'(\ln(2))$

**Question3.** The radius of a circle is measured to be 24 *cm* with a possible error in measurement of 0.2 *cm*. find the maximum percentage error in the area of the circle.