

**Math 101 (082)**  
**Quiz 3 v3 (3.9 – 4.4)**

Name:

ID #:

Section #:

Serial #:

1. Find the derivative of  $f(t) = \cosh(\ln t)$ .
2. Use differentials to estimate  $\sqrt[3]{0.97}$ .
3. Find  $\lim_{x \rightarrow \infty} (x - \ln x)$ .

**Math 101 (082)**  
**Quiz 3 v1 (3.9 – 4.4)**

Name:

ID #:

Section #:

Serial #:

1. Find the derivative of  $f(t) = \ln(\cosh e^{2t})$ .
2. Use differentials to estimate  $\sqrt{1.02}$ .
3. Find  $\lim_{x \rightarrow \infty} (\sqrt{x^2 + x} - x)$ .

**Math 101 (082)**  
**Quiz 3 v2 (3.9 – 4.4)**

Name:

ID #:

Section #:

Serial #:

1. Find the derivative of  $f(t) = \ln(\cosh e^{2t})$ .
2. Use differentials to estimate  $\sqrt{0.98}$ .
3. Find  $\lim_{x \rightarrow \infty} x \tan(1/x)$ .