

Name:

Quiz# 5
ID #:

Section: 23 Serial #:

1. Approximate $(1.004)^{-2.004}$.

2. Sketch the graph of a function that satisfies all of the given conditions;

$f'(x) > 0$ if $|x| < 2$, $f'(x) < 0$ if $|x| > 2$, $f'(2) = 0$, $\lim_{x \rightarrow \infty} f(x) = 1$, $f(-x) = -f(x)$,

$f''(x) < 0$ if $0 < x < 3$, and $f''(x) > 0$ if $x > 3$

With My Best Wishes

Name:

Quiz# 5
ID #:

Section: 30 Serial #:

1. Show that $\frac{dy}{dx}[\arctan(\tanh x)] = \operatorname{sech} 2x$.

2. Sketch the graph of the function $f(x) = e^{\arctan x}$

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