

Quiz 4

Fall 2016

MATH 221

Name: _____

For full credit please explain all of your answers. **No calculators** are allowed.

Problem 1. Compute the following limit:

$$\lim_{\theta \rightarrow 0} \frac{2}{\theta \tan(\theta)} - \frac{2}{\theta \sin(\theta)}$$

Problem 2. Compute the following limit:

$$\lim_{x \rightarrow \infty} \sqrt{x^2 + x} - x$$