

Math 10A with Professor Stankova

Quiz 2; Wednesday, 9/6/2017

Section #106; Time: 10 AM

GSI name: Roy Zhao

Name: _____

Circle True or False or leave blank. (1 point for correct answer, -1 for incorrect answer, 0 if left blank)

1. True False The range of an invertible function f is the domain of the inverse f^{-1} .
2. True False If a function f is defined at $x = 0$, then we must have $\lim_{x \rightarrow 0} f(x) = f(0)$.

Show your work and justify your answers.

3. (10 points) Let $f(t) = \frac{\sqrt{9 - t^2} - 3}{t^2}$.

(a) (2 points) What is the domain of f ?

(b) (3 points) Find $\lim_{t \rightarrow \sqrt{5}} f(t)$.

(c) (5 points) Find $\lim_{t \rightarrow 0} f(t)$.