

Last Name: SOLUTIONS

First Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

## Quiz 3 (B)

Question 1. Evaluate the following:

(a) (1 mark)  $\sin\left(\frac{9}{2}\pi\right) = 1$

(b) (1 mark)  $\cot\left(-\frac{\pi}{3}\right) = -\frac{1}{\sqrt{3}}$

(c) (1 mark)  $\csc\left(-\frac{\pi}{6}\right) = -2$

(d) (1 mark)  $\arccos(-1) = \pi$

(e) (2 marks)  $\arctan\left(\tan\left(\frac{4\pi}{3}\right)\right) = \arctan(\sqrt{3}) = \frac{\pi}{3}$

Question 2. (4 marks) Set up a table of values (with at least 6 values) to estimate the following limit if it exists:

$$\lim_{x \rightarrow 2} \frac{1}{x-2}$$

$x$	1.9	1.99	1.999	2	2.001	2.01	2.1
$f(x)$	-10	-100	-1000		1000	100	10

$$\therefore \lim_{x \rightarrow 2} \frac{1}{x-2} \text{ D.N.E.}$$