Course	Student ID	Test
MATH 1A	08675309	QUIZ 1

Question	2	3	4
Points		$2\frac{1}{2}$	$1\frac{1}{2}$
	MAX: 5	MAX: 3	MAX: 3

Question	5	6	7
Points			
	MAX: 2	MAX: 2	MAX: 3

Total	
	MAX: 18

Self Assessment [2 POINTS]

[a] What personal and/or study habits could you change to increase your likelihood of doing better on the next quiz ?

STUDY PROPER NOTATION

DO HOMEWORK RIGHT AFTER LECTURE (OR SAME DAY)

ASK QUESTIONS IN OFFICE HOURS

[b] Based on your work on the prerequisites review packet and your performance on this test, what prerequisite skills should you improve on ?

SIMPLIFYING COMPLEX FRACTIONS

WORKING WITH NEGATIVES, EXPONENTS, LOGARITHMS

TRIG VALUES + IDENTITIES

GRAPHS

[2][a] $\lim_{x\to -1^+} \dfrac{\frac{2}{x+3}-1}{\frac{3}{2x-1}+1} = \lim_{x\to -1^+} \dfrac{\frac{2-x+3}{x+3}}{\frac{3+2x-1}{2x-1}}$ (1/2)

$= \lim_{x\to -1^+} \dfrac{\frac{5-x}{x+3}}{\frac{2x+2}{2x-1}}$ (*)

$= \lim_{x\to -1^+} \dfrac{5-x}{x+3} \cdot \dfrac{2x-1}{2x+2}$ DNE

$\dfrac{6}{2} \cdot \dfrac{-3}{0}$

$\lim_{x\to -1} f(x)$ DNE SINCE $\lim_{x\to -1^+} f(x)$ DNE (*)

[b] NO, SINCE $\lim_{x\to -1} f(x)$ DNE (*)

[3] $-1 \le \cos \frac{1}{\sqrt[3]{x}} \le 1$ (1/2)

$-x^6 \le x^6 \cos \frac{1}{\sqrt[3]{x}} \le x^6$ (1/2)

$\lim_{x\to 0} -x^6 = 0 \qquad \lim_{x\to 0} x^6 = 0$ (1)

$\lim_{x\to 0} x^6 \cos \frac{1}{\sqrt[3]{x}} = 0$ (1/2)

[4] $\lim_{x\to -1^+} (1+f(x))^2 = (1+0)^2 = 1$ (1/2)

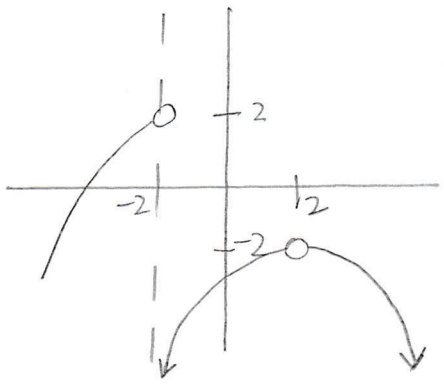
$\lim_{x\to -1^-} (1+f(x))^2 = (1+-2)^2 = 1$ (1/2)

$\lim_{x\to -1} (1+f(x))^2 = 1$ (1/2)

[5] $\sqrt{x}$ IS CONT. FOR $x>0$ (*)

(*) $\dfrac{\cos x}{2-\sqrt{x}}$ IS CONT. FOR $x>0$ EXCEPT $x=4$ (1/2)

[6]



[7] $\lim_{x\to 1} \cos^{-1} \frac{(x-1)^2}{(x-1)(x-2)} = \lim_{x\to 1} \cos^{-1} \frac{x-1}{x-2} = \cos^{-1} \frac{0}{-1} = \cos^{-1} 0$

(*) (*) (*) $\frac{\pi}{2}$