

GROUP NAME: <u>CSG</u> Logo:	Student Names (First and Last) Speaker/Presenter: _____
Date: <u>12-3-10</u> Topics:	Writer/Prep: <u>COLBY</u> QC/Leader: _____

Instructions: 2

$(1, 5) (2, 7) (3, 10)$

linear calc $x=1$ $x=3$

$$10 - 5 = 5$$

ex $y = a \cdot b^x$

$$\begin{array}{r} 1 \\ 5 \\ - \\ 7 \\ 3 \end{array}$$

find $\frac{dy}{dx}$ at $x=2$

$$2 = 44$$

calc 6: $\frac{dy}{dx}$
 $x=2$

vars $5 > 24$

$y_1 = \text{regEQ}$

calc 6: $\frac{dy}{dx}$

$$x = 2$$

$$\frac{dy}{dx} = 244$$

<p>GROUP NAME: <u>Trc 50</u></p> <p>Logo: <u>10/11</u></p>	<p>Student Names (First and Last)</p> <p>Speaker/Presenter: _____</p>
<p>Date: <u>10/11/11</u></p> <p>Topics:</p>	<p>Writer/Prep: <u>10/11/11</u></p> <p>QC/Leader: _____</p>

Instructions: 3

a) $x \geq 2$

b) $|5x+7-17| < \epsilon$
 $|5x-10| < \epsilon$
 $5|x-2| < \epsilon$
 $|x-2| < \epsilon/5$ $\delta = \epsilon/5$

class

GROUP NAME:

Apples & Apples

Logo:

Student Names (First and Last)

Speaker/Presenter:

THOMAS Y

Date:

10/25/13

Writer/Prep:

ANNIE S

Topics:

QC/Leader:

THOMAS Y

Instructions:

4

Evaluate the limit (LHR)

$$\lim_{x \rightarrow 2} \frac{x^2 - 5x + 6}{x^2 - 4} = \lim_{x \rightarrow 2} \frac{2x - 5}{2x} = -\frac{1}{4}$$

or

$$\lim_{x \rightarrow 2} \frac{x^2 - 5x + 6}{x^2 - 4} = \frac{(x-3)(x-2)}{(x+2)(x-2)} = -\frac{1}{4}$$

<p>GROUP NAME:</p> <p>Logo:</p>	<p>Student Names (First and Last)</p> <p>Speaker/Presenter: <u>Logan</u></p>
<p>Date: _____</p> <p>Topics:</p>	<p>Writer/Prep: <u>Logan</u></p> <p>QC/Leader: <u>Logan</u></p>

Instructions:

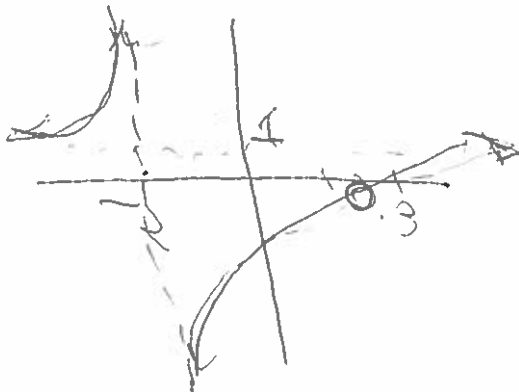
5

$$\frac{x^2 - 5x + 6}{x^2 - 4} = \frac{(x-3)(x-2)}{(x+2)(x-2)}$$

discontinuous at $x = -2, 2$

rem. discon at $x = 2$

continuous at $\mathbb{R} \setminus \{-2, 2\}$



GROUP NAME: The Scientists

Student Names (First and Last)

Logo: Scientists

Speaker/Presenter: _____

Date: 10-23

Writer/Prep: _____

Topics:

QC/Leader: _____

Instructions:

6

$$\lim_{x \rightarrow 0} \frac{\sin x}{x}$$

$$f(x) = \frac{1}{x} \quad x = .1, .01, .001$$

x	-.1	-.01	-.001001	.01	.1
y	.99	.999	.9999999	.99

error

Ans: (1)

$$\lim_{x \rightarrow 2} \frac{\sqrt{x+1} - 2}{x-2} \quad \left(\frac{\sqrt{x+1} - 2}{x-2} \right)$$

(1/4)

Kyle Traverso
Algebra Collection

GROUP NAME: Logo:	Student Names (First and Last) Speaker/Presenter: _____
Date: _____ Topics:	Writer/Prep: _____ QC/Leader: _____

Instructions:

7

USE the definition of derivative
 $f(x) = x^2 + 3x - 12$

$$f(x+h) - f(x)$$

~~work~~

~~$$[(x+h)^2 + 3(x+h) - 12] - (x^2 + 3x - 12)$$

$$x^2 + 2xh + h^2 + 3x + 3h - 12 - x^2 - 3x + 12$$~~

$$\frac{f(x+h) - f(x)}{h} = \frac{2xh + h^2 + 3h}{h}$$

$$f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h} = 2x + 3$$

$$\boxed{2x + 3}$$

$$f(x+h) \cdot f(x)$$

GROUP NAME: <u>The Jokers</u>	Student Names (First and Last)
Logo:	Speaker/Presenter: <u>Ellen Stewart</u>
Date: <u>10/2/3</u>	Writer/Prep: <u>Ryan Bigley</u>
Topics:	QC/Leader: <u>Ellen Stewart</u>

Instructions:

8

$$p(t) = t(5 - 2t) + 7$$

~~the~~ $t = 0$
 $t = 2$

$$p(0) = 0(5 - 2(0)) + 7 = 7$$

$$p(2) = 2(5 - 2(2)) + 7 = 9$$

$$\frac{9 - 7}{2 - 0} = \frac{2}{2} = 1 \text{ average speed of the ball}$$

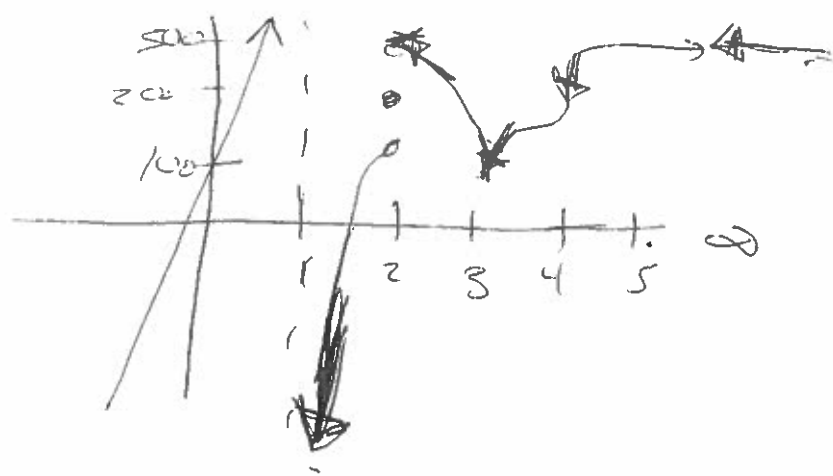
$$p'(t) = 5 - 2t + 7$$

~~5 - 4t + 7 = p'(t)~~

$$p'(1) = 1 \text{ instantaneous speed at } t = 1$$


GROUP NAME: CSC	Student Names (First and Last)
Logo:	Speaker/Presenter: _____
Date: 10/23/13	Writer/Prep: COURTNEY
Topics:	QC/Leader: _____

Instructions: 9



Handwritten scribbles or initials.

$$\lim_{x \rightarrow \infty^+} f(x) = DNE$$

GROUP NAME: <u>Irish math Bombs</u> Logo: 	Student Names (First and Last) Speaker/Presenter: <u>Connor</u>
Date: _____ Topics: _____	Writer/Prep: <u>Bill</u> QC/Leader: <u>Bobby</u>

Instructions: 10

1. ~~Does not exist~~ See #9's graph
Does not exist in simplified
2. Does not exist
3. Does not exist + $C \cdot m^2$
4. Does not exist
5. 0

Holla at a Brotha

Bahston Sawks Cack

GROUP NAME: <u>WOLF PACK</u>	Student Names (First and Last)
Logo:	Speaker/Presenter: <u>Jared</u>
Date: _____	Writer/Prep: <u>[Signature]</u>
Topics: <u>TEST I REVIEW</u>	QC/Leader: <u>DC</u>

Instructions:

11

$$c) f(x) = \sqrt{x} + \cos(2\pi/7)$$

$$= x^{1/2} + .6234898$$

$$f'(x) = \frac{1}{2}x^{-1/2}$$

$$f'(x) = \frac{1}{2\sqrt{x}}$$

$$b) y = 3x^2 + x - 2$$

$$y' = 6x + 1$$

$$y'(0) = 1$$

$$y'' = 6$$

$$y''(0) = 6$$

<p>GROUP NAME: Time is Money</p> <p>Logo:</p>	<p>Student Names (First and Last)</p> <p>Speaker/Presenter: <u>Angelina</u></p>
<p>Date: <u>10/22/12</u></p> <p>Topics: <u>Review Test # 2</u></p>	<p>Writer/Prep: <u>Sharon Singh</u></p> <p>QC/Leader: <u>Eugene</u></p>

Instructions:

12

g) given the function, find A so that the function is continuous:

$$f(x) = \begin{cases} Ax - 5 & x < 1 \\ x^2 + 2 & x \geq 1 \end{cases}$$

lim $x \rightarrow 1^-$

$$A(x) - 5 = x^2 + 2$$

$$A(1) - 5 = 1^2 + 2 \quad (x=1)$$

$$A - 5 = 3$$

$$A = 3 + 5$$

$$A = 8$$

lim $x \rightarrow 1^+$

$$1^2 + 2 = 3$$

$$8 - 5 = 3$$

GRAPH

$$y_1 = 8x - 5$$

$$y_2 = x^2 + 2$$

graph



GROUP NAME: Wolf Pack
 Logo:
 Date: 10/23
 Topics: TEST I REVIEW

Student Names (First and Last)
 Speaker/Presenter: Zayshun
 Writer/Prep: Jared
 QC/Leader: Dr

Instructions: # 13

a)
$$\lim_{x \rightarrow \infty} \frac{3x^{200} - 5x + 6}{5x^{2000} - 9}$$

$$\lim_{x \rightarrow \infty} \frac{\frac{3x^{200}}{x^{2000}} - \frac{5x}{x^{2000}} + \frac{6}{x^{2000}}}{\frac{5x^{2000}}{x^{2000}} - \frac{9}{x^{2000}}}$$

$$\lim_{x \rightarrow \infty} \frac{0 - 0 + 0}{5 - 0} = \frac{0}{5} = \textcircled{0}$$

b)
$$\lim_{x \rightarrow \infty} \frac{3x^{200} - 5x + 6}{5x^{200} - 9}$$

$$\lim_{x \rightarrow \infty} \frac{\frac{3x^{200}}{x^{200}} - \frac{5x}{x^{200}} + \frac{6}{x^{200}}}{\frac{5x^{200}}{x^{200}} - \frac{9}{x^{200}}}$$

$$\lim_{x \rightarrow \infty} \frac{3 - 0 + 0}{5 - 0} = \textcircled{\frac{3}{5}}$$

c)
$$\lim_{x \rightarrow \infty} \frac{3x^{2000} - 5x + 6}{5x^{200} - 9}$$

$$\lim_{x \rightarrow \infty} \frac{\frac{3x^{2000}}{5x^{200}} - \frac{5x}{5x^{200}} + \frac{6}{5x^{200}}}{\frac{5x^{200}}{5x^{200}} - \frac{9}{5x^{200}}}$$

$$\frac{\infty - 0 + 0}{1 - 0} = \frac{\infty}{1}$$

$$\lim_{x \rightarrow \infty} = \textcircled{\infty}$$