1ST TRY... 3 POINTS
2ND TRY... 2 POINTS
3RD TRY... High five!

Group Members:

1. $\displaystyle\lim_{x\to-2}\frac{x^2+1}{3x^2-2x+5}$

2. $\displaystyle\lim_{x\to0}\frac{\sin 2x}{3x}$

3. $\displaystyle\lim_{x\to0}(e^x\sin x)$

4. $\displaystyle\lim_{x\to1}\frac{x^2-1}{2x^2-x-1}$

5. $\displaystyle\lim_{x\to0}\frac{\tan x}{x}$

6. $\displaystyle\lim_{x\to4}\sqrt{1-2x}$

Group Members:

1. $\displaystyle\lim_{x\to-\infty}\frac{2x^2+3}{5x^2+7}$

2. $\displaystyle\lim_{x\to\infty}\frac{x}{e^x}$

3. $\displaystyle\lim_{x\to\infty}\frac{x^3-4x^2+3x+3}{x-3}$

4. $\displaystyle\lim_{x\to-\infty}\frac{5-x^4}{x^3+2}$

5. Find the vertical asymptote(s) and use limits to describe the behavior to the left and right of the asymptote(s).

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

6. Find a right and left end behavior model for the function.

$$f(x)=-3x+e^x$$

3 Strikes Yer Out!

Worksheet C - 2.3

1ST TRY... 3 POINTS
2ND TRY... 2 POINTS
3RD TRY... High five!

Group Members:

1. What are the 3 different types of discontinuity?

2. Find all discontinuities of the function and give what type each is:
$$f(x) = \frac{5x^2 - 13x - 6}{3x^2 - 5x - 12}$$

3. Is the function continuous or not? Explain why or why not.
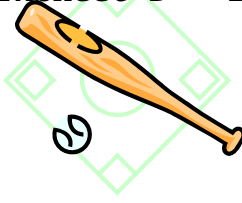$$f(x) = \begin{cases} x^2 + 5, & x \geq 1 \\ 12x - 5, & x < 1 \end{cases}$$

4. Find the value(s) of "c" such that f(x) is continuous at x=2.
$$f(x) = \begin{cases} c^2 x + 5, & x \geq 2 \\ x + 8, & x < 2 \end{cases}$$

3 Strikes Yer Out!

Worksheet D - 2.4

1ST TRY... 3 POINTS
2ND TRY... 2 POINTS
3RD TRY... High five!

Group Members:

1. Find the average rate of change of $f(x) = x^3 + 2$ over [2, 5].

2. Find the slope of the curve $f(x) = \dfrac{1}{1-x}$ at x = 4.

3. Find the equation of the normal line of $f(x) = x^2 + 3x + 5$ at x = -2.

Names:

_____

_____

_____

_____

Worksheet	1st Attempt – 3 points	2nd Attempt – 2 points	3rd Attempt – HIGH FIVE!
A			
B			
C			
D			
Total Points			

3 Strikes Yer Out Rules

1) Each worksheet has 3-6 problems. After you are done, bring up the one you finished for grading.

2) You must *work together* so that each group member is at the same pace.
   Note: Hitchhiking is illegal in Calculus!!

3) When your **whole group** is finished with the worksheet, one person should bring *ALL* worksheets to check with me. Bring your *score sheet* with you!!

4) Scoring:

   - If your group gets *ALL* problems correct the first time, you will receive 3 points (to be written on the score sheet).

   - Otherwise, you will have to take your sheet, go back, and correct them….on the second time, you will receive 2 points.

   - ….on the third time…it's a HIGH FIVE FOR YOU!!

Good Luck!!