

LIMIT BINGO

Michele Renehan, SI Leader for Dr. David Marshall's Spring 2003 M408C class, livened up her discussion section by getting students to play "Limit Bingo." Michele concluded that the activity succeeded in getting each student involved in practicing a variety of limits. Here's how to play:

- 1) Each student is given a distinct worksheet with 15 limit problems
- 2) Give the students 15 minutes to compute the limits, individually or in pairs.
- 3) SI leader calls off the numerical answers to the limits in random order and students check off those that match with their answers.
- 4) The game ends when a student yells "BINGO!" for having boxes checked all in a row.
- 5) A prize may be given to the student that wins the most games.

Variations: require all boxes to be checked around the perimeter, have each box on the entire worksheet checked, or have a diagonal line checked. A prize was given to the student that won the most games.

$\lim_{x \rightarrow 1} \frac{3}{x+1}$	$\lim_{x \rightarrow 0} \frac{\sin x}{2x}$	$\lim_{x \rightarrow 0} x \csc x$	FREEBIE!
$\lim_{x \rightarrow 0} \frac{4x}{\sin 3x}$	$\lim_{x \rightarrow 0} \frac{1 - \frac{1}{x^2}}{1 + \frac{1}{x^2}}$	$\lim_{x \rightarrow 2} \frac{x^2 - x - 2}{x - 2}$	$\lim_{x \rightarrow 0} \frac{9x}{x}$
$\lim_{x \rightarrow 0^+} \frac{2 x }{x}$	$\lim_{x \rightarrow 4} 2$	$\lim_{x \rightarrow 0} \frac{2x}{\sin 3x}$	$\lim_{x \rightarrow 0} \frac{x^2}{x^2 + 1}$
$\lim_{x \rightarrow 2} x^3$	$\lim_{x \rightarrow 0^-} \frac{x}{ x }$	$\lim_{x \rightarrow 0} \frac{1}{x^3}$	$\lim_{x \rightarrow 4} \frac{4x - 16}{x - 4}$

Sample Bingo Card from LIMIT BINGO (created by Michele Renehan)