

Sample! YOUR TEST WILL HAVE 6 PROBLEMS IN 15 MINUTES. *Sample!*

Math 151:4,5,6

9/25/2006

Name _____ Section _____

First Computational Test (Limits)

SHOW DETAILS (algebra, limit laws) in the space next to each problem. For the experts: do **NOT** use l'Hospital's rule.

YOU MUST GIVE SOME SUPPORTING EVIDENCE. AN ANSWER ALONE WILL NOT RECEIVE FULL CREDIT.

1. $\lim_{x \rightarrow 1} \frac{x^2(x-3)}{2x+3}$

Answer to 1 _____

2. $\lim_{x \rightarrow 2^-} \frac{|3x-6|}{x-2}$

Answer to 2 _____

3. $\lim_{x \rightarrow \infty} \frac{6x-5x^3}{2x^3+9}$

Answer to 3 _____

4. $\lim_{x \rightarrow 3^+} \frac{x(x-3)}{\sqrt{x}-\sqrt{3}}$

Answer to 4 _____

OVER

5. $\lim_{x \rightarrow +\infty} \sqrt{x^2 - x - 3} - x$

Answer to 5 _____

6. $\lim_{x \rightarrow -1^+} \frac{x(x-2)}{x+1}$

Answer to 6 _____

7. $\lim_{x \rightarrow -\infty} \frac{\sqrt{5x^2 - 9}}{2 - 5x}$

Answer to 7 _____

8. $\lim_{x \rightarrow 0} \frac{(x-1)^3 + 1}{x}$

Answer to 8 _____