SI Review Session Exam 1
Saturday 12:00 – 2:00 PM, Rm. 1223

Prof. Stockton : Calculus I : Fall 2007
SI Leader : Neil Jody

1.) $\displaystyle \lim_{x \to 0} \frac{\sin(2x)}{5x}$

2.) $\displaystyle \lim_{x \to 0^-} x \sin\left(\frac{1}{x}\right)$

3.) $\displaystyle \lim_{x \to 0^+} x \sin\left(\frac{1}{x}\right)$

4.) $\displaystyle \lim_{x \to -\infty} \cos\left(\frac{1}{x}\right)$

5.) $\displaystyle \lim_{x \to +\infty} \cos\left(\frac{1}{x}\right)$

6.) $\displaystyle \lim_{x \to 0^-} \cot(x)$

7.) $\displaystyle \lim_{x \to 0^+} \cot(x)$

8.) $\displaystyle \lim_{x \to 0} \frac{\sin(7x)}{\sin(3x)}$

9.) $\displaystyle \lim_{x \to 0} \frac{4x}{\tan(x)}$

10.) $\displaystyle \lim_{x \to 0^-} \cos\left(\frac{1}{x}\right)$

11.) $\displaystyle \lim_{x \to 0^+} \cos\left(\frac{1}{x}\right)$

12.) $\displaystyle \lim_{x \to 4^-} \frac{\frac{1}{5} - \frac{1}{x^2}}{2x + 8}$

13.) $\displaystyle \lim_{x \to 4^+} \frac{\frac{1}{5} - \frac{1}{x^2}}{2x + 8}$

14.) $\displaystyle \lim_{x \to 0^-} \frac{\frac{1}{5} - \frac{1}{x^2}}{2x + 8}$

15.) $\displaystyle \lim_{x \to 0^+} \frac{\frac{1}{5} - \frac{1}{x^2}}{2x + 8}$

16.) $\displaystyle \lim_{x \to -\infty} \frac{\frac{1}{5} - \frac{1}{x^2}}{2x + 8}$

17.) $\displaystyle \lim_{x \to +\infty} \frac{\frac{1}{5} - \frac{1}{x^2}}{2x + 8}$

18.) $\displaystyle \lim_{x \to 0^+} \frac{\sqrt{-4x^2 + 5x} - 1}{x - 1}$

19.) $\displaystyle \lim_{x \to 1} \frac{\sqrt{-4x^2 + 5x} - 1}{x - 1}$

20.) $\displaystyle \lim_{x \to \frac{5}{4}^-} \frac{\sqrt{-4x^2 + 5x} - 1}{x - 1}$

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21.) $\lim\limits_{x \to 0} \dfrac{\tan(x)}{x}$

22.) $\lim\limits_{x \to 0^-} \dfrac{|x|}{x}$

23.) $\lim\limits_{x \to 0^+} \dfrac{|x|}{x}$

24.) $\lim\limits_{x \to 0} \dfrac{\sin^2(x)}{3x^2}$

25.) $\lim\limits_{x \to 0^-} \dfrac{\sin(x)}{1 - \cos(x)}$

26.) $\lim\limits_{x \to 0^+} \dfrac{\sin(x)}{1 - \cos(x)}$

27.) $\lim\limits_{x \to -\infty} \dfrac{x^6+5x^5-9x^4-53x^3-40x^2+72x+360}{x^5-9x^4-13x^3+117x^2+36x-324}$

28.) $\lim\limits_{x \to +\infty} \dfrac{x^6+5x^5-9x^4-53x^3-40x^2+72x+360}{x^5-9x^4-13x^3+117x^2+36x-324}$

29.) $\lim\limits_{x \to -\infty} \dfrac{x^3+6x^2+3x-10}{x^4-10x^3+11x^2+46x-48}$

30.) $\lim\limits_{x \to +\infty} \dfrac{x^3+6x^2+3x-10}{x^4-10x^3+11x^2+46x-48}$

31.) $\lim\limits_{x \to -4} \dfrac{|x+4|}{x^2-16}$

32.) $\lim\limits_{x \to 4^-} \dfrac{|x+4|}{x^2-16}$

33.) $\lim\limits_{x \to 4^+} \dfrac{|x+4|}{x^2-16}$

34.) $\lim\limits_{x \to -\infty} \dfrac{\sqrt{3x^4+x}}{x^2-8}$

35.) $\lim\limits_{x \to +\infty} \dfrac{\sqrt{3x^4+x}}{x^2-8}$

36.) $\lim\limits_{x \to -\infty} \dfrac{\sqrt{4x^2+5x}}{x-1}$

37.) $\lim\limits_{x \to +\infty} \dfrac{\sqrt{4x^2+5x}}{x-1}$

38.) $\lim\limits_{x \to -\infty} \dfrac{2-x}{\sqrt{7+6x^2}}$

39.) $\lim\limits_{x \to +\infty} \dfrac{2-x}{\sqrt{7+6x^2}}$

40.) $\lim\limits_{x \to -\infty} \dfrac{x+4x^3}{1-x^2+7x^3}$

41.) $\lim\limits_{x \to +\infty} \dfrac{x+4x^3}{1-x^2+7x^3}$

42.) $\lim\limits_{x \to -2} \dfrac{|x^2-4|x}{x+2}$

43.) $\lim\limits_{x \to -\infty} \dfrac{|x^2-4|x}{x+2}$

44.) $\lim\limits_{x \to +\infty} \dfrac{|x^2-4|x}{x+2}$

45.) $\lim\limits_{x \to -\infty} \dfrac{\sin(\pi x)}{x+3}$

46.) $\lim\limits_{x \to +\infty} \dfrac{\sin(\pi x)}{x+3}$

47.) $\lim\limits_{x \to 2^-} \dfrac{\cos\left(\frac{\pi}{x}\right)}{x-2}$

48.) $\lim\limits_{x \to 2^+} \dfrac{\cos\left(\frac{\pi}{x}\right)}{x-2}$

49.) $\lim\limits_{x \to -\infty} \dfrac{\cos\left(\frac{\pi}{x}\right)}{x-2}$

50.) $\lim\limits_{x \to +\infty} \dfrac{\cos\left(\frac{\pi}{x}\right)}{x-2}$

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