

SI Session: Week of March 3rd
Tuesdays 5:30 – 7:30 PM, Rm. 1130
Wednesdays 4:20 – 6:20 PM, Rm. 1229

Prof. Stockton : Calculus II : Spring 2008
SI Leader : Neil Jody

1. $\lim_{x \rightarrow 2^-} \frac{\sqrt{4-x^2}}{x-2}$, form:

2. $\lim_{x \rightarrow 0^+} \frac{e^x - (1+x)}{x^n}$; n is a positive integer, form:

3. $\lim_{x \rightarrow 1} \frac{\arctan(x) - (\pi/4)}{x-1}$, form:

4. $\int \frac{x^3 - x + 3}{x^2 + x - 2} dx$

5. $\lim_{x \rightarrow +\infty} \frac{\sin(x)}{x - \pi}$, form:

6. $\lim_{x \rightarrow +\infty} \frac{\ln(x^4)}{x^3}$, form:

7. $\lim_{x \rightarrow +\infty} x \tan\left(\frac{1}{x}\right)$, form:

8. $\lim_{x \rightarrow 0^+} (e^x + x)^{2/x}$, form:

9. $\lim_{x \rightarrow +\infty} \left(1 + \frac{1}{x}\right)^x$, form:

10. $\int \frac{2x-3}{(x-1)^2} dx$

11. $\lim_{x \rightarrow +\infty} (1+x)^{1/x}$, form:

12. $\lim_{x \rightarrow 4^+} [3(x-4)]^{(x-4)}$, form:

13. $\lim_{x \rightarrow 1^+} (\ln x)^{(x-1)}$, form:

14. $\lim_{x \rightarrow 2^+} \left(\frac{1}{x^2 - 4} - \frac{\sqrt{x-1}}{x^2 - 4} \right)$, form:

15. $\int \frac{x^2 + x + 3}{x^4 + 6x^2 + 9} dx$

16. $\int \frac{x}{x^2 - 6x + 5} dx$

$$17. \int_1^5 \frac{x-1}{x^2(x+1)} dx$$

$$18. \int \frac{3\cos(x)}{\sin^2(x) + \sin(x) - 2} dx$$