

1st Calculus AB

- 1) If I speak in the language of limits and theorems, but have not love, I am only a college textbook.
- 2) If I can calculate trigonometric functions in my head, and can prove the Fundamental Theorem of Calculus, and if I have faith that I can score a “5” on the AP Calculus Test, but have not love, I am only depending on Joe Antrosio for the answers.
- 3) If I give my ‘crutch’ to the algebra students and offer my services as a tutor, but have not love, I could teach and teach but they would learn nothing.
- 4) Love is spending thirty minutes finding the fourth derivative of $(\sin x) / x$, love is the small blue hints in the textbook that explain how to set up the equations. It does not hate those who do not need the grading curve, it does not flaunt its prowess of linearizations, it is not too proud to ask for the area formula of a sector.
- 5) It does not drown out the teacher with incessant babbling, it does not sit next to Megan Merritt for its own benefit, it does get upset when minus signs are miscopied, it does not count the times the teacher writes the wrong coefficients.
- 6) Love does not delight in doing Riemman Sums but rejoices in the truth that $\int_a^b f(x)dx = F(b) - F(a)$.
- 7) Love always reminds you that 2^2 is 4, not 8. Love always trusts that the limit of $(\sin x) / x$ as x approaches zero equals one. Love always hopes that Mr. Olfert won’t give a speed test of trig functions and their values. Love works through writer’s cramp on the AP Test.
- 8) Love has no discontinuities along its domain of $-\infty \leq x \leq \infty$. But where there are tangents, they will be undefined at $x = \pi / 2$; where there are loud talkers in class, they will be shushed;

where there is knowledge of finding limits by hand, it will be...wait a minute, I don't remember that section.

9) For we know about the chain rule and we integrate with the chain rule.

10) But when the TI-82 comes, the slide rules will disappear.

11) When I was in Algebra, I talked like a freshman, I thought like a freshman, I calculated slopes like a freshman. When I became a senior, I put my "rise over run" ways behind me.

12) Now we see but a poor sketching of y prime; then we shall see an accurate graph of the original function. Now I know single variable calculus, then I shall know multivariable calculus, even as Mr. Olfert knows multivariable calculus.

13) And now these three remain: derivatives, integrals, and love. But the greatest of these is the derivative of the integral of love.