Math 300, Spring 2003
Writing for Mathematics

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Lemma 1 (Law of Cosines) *The Law of Cosines states that if the three sides of triangle have lengths a, b, c and if γ is the angle opposite the side of length c, then*

$$c^2 = a^2 + b^2 - 2\cos\gamma.$$

In the special case that γ is a right angle we obtain as a corollary the Phythagorean Theorem:

$$c^2 = a^2 + b^2.$$

Here is an example of how Tex treats a complicated expression. Compare the output to the same expression written in word in the file: Math in Word.

$\Sigma_{i=1}^{n} i = \frac{n(n+1)}{2}$ or $\int_{2}^{x} \frac{1}{x}\, dx = \ln x - \ln 2$.