## **Math Document**

In this first section, we are setting the delimiter for in line math, and then we are defining the quad dratic formula in the variable *quad*. Here is the equation for a line.

$$y = mx + b$$

Here is the quadratic formula. Notice that we just had to call our predefined variable.

$$x = \frac{-b \pm (b^2 - 4ac)^{\frac{1}{2}}}{2a} \,.$$

Here is an example of us using a sum in the equation for calculating the mean.

$$\overline{x} = \frac{1}{n} \cdot \sum_{i=1}^{n} x_i$$

Below is some of the Greek alphabet. Notice that we can typeset both upper and lower case characters.

K, 
$$\kappa$$
, E,  $\varepsilon$ , O,  $o$ ,  $\Pi$ ,  $\pi$ ,  $\Sigma$ ,  $\sigma$ , B,  $\beta$ , A,  $\alpha$ 

**Definition.** A sequence  $s_n$  is said to converge to some  $s \in \mathbf{R}$  if  $\forall \varepsilon > 0, \exists N \in \mathbf{N}$  such that  $\forall n \in \mathbf{N}$ 

 $n \ge N \Longrightarrow |s_n - s| < \varepsilon.$