

$$\sup\{f(x)/x \in S\}$$

Another way of writing it  $\sup_{x \in S} f(x)$

$$\left. \begin{array}{rcl} a+b & = & -3 \\ a+b+c & = & -34 \\ b+c & = & 3 \end{array} \right\} \tag{1}$$

$$\lim_{\theta \rightarrow \infty} \frac{\tan \theta}{\theta}$$

$$\lim_{\theta \rightarrow \infty} \frac{\tan \theta}{\theta}$$

$$\frac{\partial y}{\partial x} f(x)$$

$$\frac{\partial y}{\partial x} f(x)$$

$$\int_0^{\pi/2} \cos \theta \, d\theta$$

$$\int_0^{\pi/2} \cos \theta \, d\theta$$

$$\sum_{i=0}^{n-1} (x_i - x_{i-1})^2$$

$$\sum_{i=0}^{n-1} (x_i - x_{i-1})^2$$

$$\int_0^2 \int_1^3 \int_1^2 x^3 - 2x^2 + 7x - 2 \, dx$$

$$\int_0^2 \int_1^3 \int_1^2 x^3 - 2x^2 + 7x - 2 \, dx$$

Matter goes with the text  $\lim_{n \rightarrow \infty} \frac{1}{n}$  will require `\displaystyle`

$$\lim_{n \rightarrow \infty} \frac{1}{n}$$