$$\begin{array}{c} x \text{ over y } \frac{x}{y} \\ x \text{ over y } \frac{x}{y} \\ x \text{ atop y } \\ y \\ \text{sum x[i] for i equals 1 to n } \sum_{i=1}^n x_i \end{array}$$

product of P(X=x) for all values of x
$$\prod_{x} P(X=x)$$
 definite integral of f(x) wrt x $\int_{a}^{b} f(x)dx$

union of A[i] for i equals 1 to $n \bigcup_{i=1}^{n} A_i$

intersection of A[i] $\bigcap_{i=1}^{n} A_i$