$$\times \div \equiv \neq \neq \geq \geq \leq \leq \not\leq \; \forall \mid \exists \in \notin \notin \ni \; \pi \theta \alpha \beta \rightarrow \Rightarrow \backslash$$

$$A \backslash B = \{a \in A \mid a \notin B\}$$

$$|x|^2 = x^2, |x| \geq 0$$

$$\operatorname{lcm}(x, y) = \text{the smallest positive integer } z \text{ so that } x \mid z \text{ and } y \mid z$$

$$\left(\frac{a}{b}\right)^2 = \frac{a^2}{b^2}$$

The cross ratio of four numbers is defined to be $(a, b; c, d) = \frac{a-c}{c-b} \Big/ \frac{a-d}{d-b}$

the dyadic rationals are $\left\{ \frac{a}{2^b} \,\middle|\, a, b \text{ integral} \right\}$

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The permutation group $\mathfrak{S}_n$ is defined as $\{\pi \in \mathbb{Z}_n \mid 1 \leq \pi \leq n, \text{ all } \pi_i \text{ distinct}\}$ and has cardinality $n!$, while the power set $\mathcal{P}(n)$is defined as the family of all subsets of S, and has cardinality $2^{|S|}$.