Title of the Lecture

Description of the lecture

¡1-¿ A set A is a subset of B, ACB, if $a \in A \implies a \in B$ ¡2-¿ Two sets are equal, $A = B$, if $A \subseteq B$ and $B \subseteq A$ ¡3-¿ A is a proper subset of B, ASB, if ACB and $A \neq ASB$ ¡4-¿ Set building notation $\{x \mid P(x)\}$

¡1-¿

1. $N = \{1, 2, 3, 4, \ldots\}$
2. $Z = \{0, 1, -1, -2, \ldots\}$
3. $Q = \{m \div n \mid m, n \in Z, n \neq 0\}$
4. $R = \{\text{real numbers} \cup \{\text{irrational numbers}\}\}$ along with irrationals like $\pi, \sqrt{2}, \ldots$
5. $N = \{2m - 1 \mid m \in N\}$
6. $C = \{1, 3, 5, \ldots\}$

¡2-¿ The union of A, B is the set $A \cup B = \{x \mid x \in A \text{ or } x \in B\}$ ¡3-¿ The intersection of A, B is the set $A \cap B = \{x \mid x \in A \text{ and } x \in B\}$