

1. If p divides q and p divides r , then p divides $q + r$.

2. $P \Rightarrow Q$ is logically equivalent to its contrapositive.

3. If $a \equiv_5 4$, then $a^2 \equiv_5 1$.

4. $\sqrt{3}$ is irrational.

5. For any $n \in \mathbb{Z}^+$,

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