

1. For all m, n : $m + n = n + m$ and $nm = mn$ (the commutative laws for addition and multiplication).
2. For all m, n, k : $m + (n + k) = (m + n) + k$ and $m(nk) = (mn)k$ (the associative laws for addition and multiplication).
3. For all m, n, k : $k(m + n) = (km) + (kn)$ (the distributive law).
4. For all n : $n + 0 = n$ (the additive identity law).
5. For all n : $1n = n$ (the multiplicative identity law).
6. For all n , there is a number k such that $n + k = 0$ (the additive inverse law).
7. For all m, n, k , where $k \neq 0$: if $km = kn$, then $m = n$ (the cancellation law).