Hello World

Definition 1. *Integral domain is commutative Ring R, if $a, b \in R$ and $a, b \neq 0$ then $ab \neq 0$*

Definition 2. *An integral domain is called Euclidean if there exists function f: $R \backslash \{0\} \to \mathbb{N}$ satisfies the two properties:*
1. $f(a) < f(ab)$ for all nonzero a, $b \in R$
2. $\forall a, b \in R$ with $b \neq 0$, there exists q, r such that $a = q * b + r$ where $f(r) < f(q)$