

Definition: A function $f : D \rightarrow C$ is **onto** (or surjective) means for every b in the codomain, there is an element a in the domain with $f(a) = b$. Formally, $f : D \rightarrow C$ is onto means _____.

Definition: For sets A, B , we say that **the cardinality of A is no smaller than the cardinality of B** , and write $|A| \geq |B|$, to mean there is an onto function with domain A and codomain B .