

Successor Cardinals

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Definition 0.1. Let κ be a cardinal. κ^+ is the cardinal such that $\kappa < \kappa^+$ and there is no cardinal ν such that $\kappa < \nu < \kappa^+$.

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Definition 0.2. A successor cardinal is a cardinal number κ such that $\kappa = \nu^+$ for some cardinal number ν .

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Proposition 0.3. Let κ be a cardinal. Then $|\alpha| \leq \kappa$ for every $\alpha \in \kappa^+$.