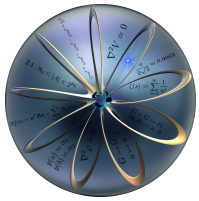

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normal (ordinal) function

Canonical name	NormalordinalFunction
Date of creation	2013-03-22 15:33:10
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Owner	florisje (7763)
Last modified by	florisje (7763)
Numerical id	7
Author	florisje (7763)
Entry type	Definition
Classification	msc 03E10
Defines	continuous (for ordinal functions)
Defines	order preserving (for ordinal functions)
Defines	normality
Defines	normal function

Definition. A function $F\colon \mathbf{On} \to \mathbf{On}$ is *continuous* if and only if for each $u \subset \mathbf{On}$ such that $u \neq \emptyset$ it holds that $F(\sup(u)) = \sup\{F(\alpha) | \alpha \in u\}$.

Definition. A function $F\colon \mathbf{On} \to \mathbf{On}$ is *order preserving* if and only if for each $\alpha, \beta \in \mathbf{On}$ such that $\alpha < \beta$ it follows that $F(\alpha) < F(\beta)$.

Definition. A function $F\colon \mathbf{On} \to \mathbf{On}$ is a *normal* function if and only if F is continuous and order preserving.