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fixed points of normal functions

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If $f: M \rightarrow \mathbf{On}$ is a function from any set of ordinals to the class of ordinals then $\text{Fix}(f) = \{x \in M \mid f(x) = x\}$ is the set of fixed points of f . f' , the *derivative* of f , is the enumerating function of $\text{Fix}(f)$.

If f is <http://planetmath.org/KappaNormal> κ -normal then $\text{Fix}(f)$ is κ -closed and κ -normal, and therefore f' is also κ -normal.

For example, the function which takes an ordinal α to the ordinal $1 + \alpha$ has a fixed point at every ordinal $\geq \omega$, so $f'(\alpha) = \omega + \alpha$.