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Sard's theorem

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Entry type Theorem Classification msc 57R35 **Theorem.** Let U be an open set in \mathbb{R}^m , V be an open set in \mathbb{R}^n and $f:U\to V$ be a \mathbb{C}^k function. If $k\geq m/n$, then the set of critical values of f has n-dimensional measure zero.

References

- [1] S.G. Krantz, H. R. Parks, *The Implicit Function Theorem: History, Theory, and Applications*, Birkhäuser, Boston, c. 2002
- [2] H. Federer, $Geometric\ Measure\ Theory,$ Springer-Verlag, New York, 1969