



irreducible n-manifold

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An <http://planetmath.org/TopologicalManifold> n -manifold M is called *irreducible* if for each embedding of a standard $(n-1)$ -sphere S^{n-1} in M , there is an embedding of a <http://planetmath.org/StandardNBall> standard n -ball D^n in M such that the image of the boundary ∂D^n coincides with the image of S^{n-1} .

In case of dimension three it can be proved that each irreducible 3-manifold is also a <http://planetmath.org/Prime3Manifold> prime 3-manifold.