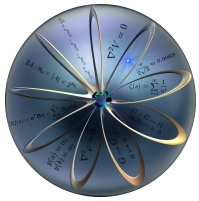

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defect

Canonical name	Defect
Date of creation	2013-03-22 16:05:22
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Classification	msc 51M10
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Related topic	AreaOfASphericalTriangle

Consider a triangle $\triangle ABC$ in either `http://planetmath.org/NonEuclideanGeometry`hyperbol
or spherical geometry in which its angle sum in radians is Σ.

In hyperbolic geometry, the *defect* of $\triangle ABC$ is $\delta(\triangle ABC) = \pi - \Sigma$.

In spherical geometry, the *defect* of $\triangle ABC$ is $\delta(\triangle ABC) = \Sigma - \pi$.

Note that, in both hyperbolic and spherical geometry, the area of a is
equal to its defect.