Cylindrical Deformation of Triangles

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The study depicts the mapping of the triangle on the cylindrical surface, i.e. the cylindrical deformation of the triangle. The described mapping is characterized by a curious geometric property: the lengths of the triangle sides against the mapping are invariant, while the angles may change. The study describes the position of the angle against the main directions of the cylinder, with the size remaining the same. In all the other cases cosine formula of the mapped angle is derived. It also substantiated that in deformed triangles sum of the angles equals 180 degrees.

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