

Neutral Geometry

rectangles exist \Leftrightarrow all triangles have angle sum 180° \Leftrightarrow Euclidean parallel postulate

Hyperbolic Geometry

- \nexists rectangles
- all triangles have angle sum $< 180^\circ$
- parallel lines are not equidistant
- angle of parallelism
 - depends only on distance
 - decreases with distance