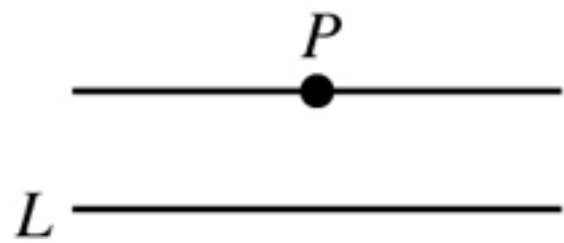


Carroll & Ostlie Figure 29.15

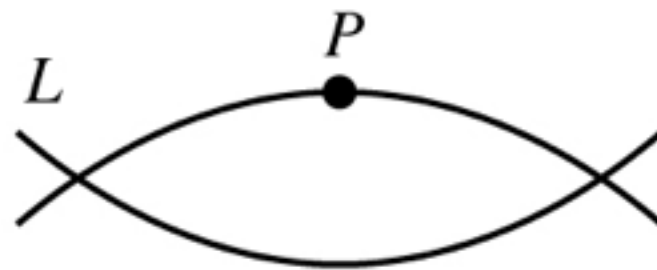
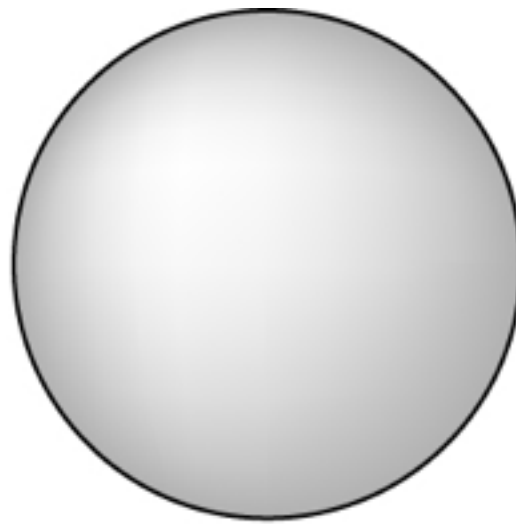
Forms of Geometry

Euclidean



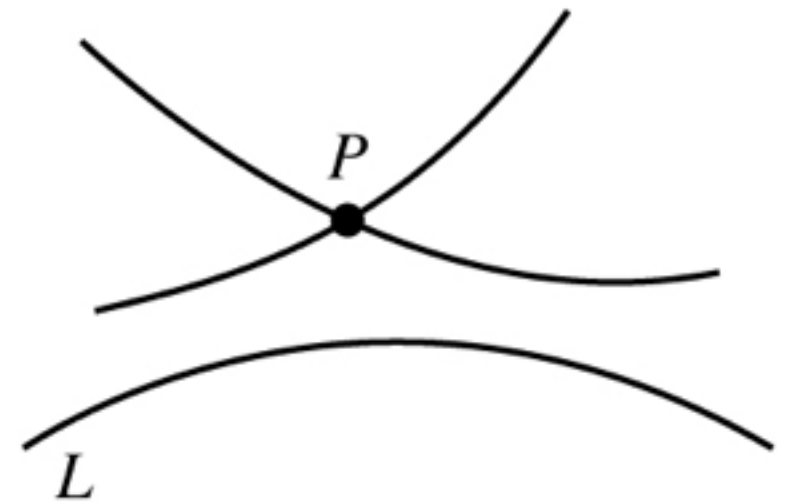
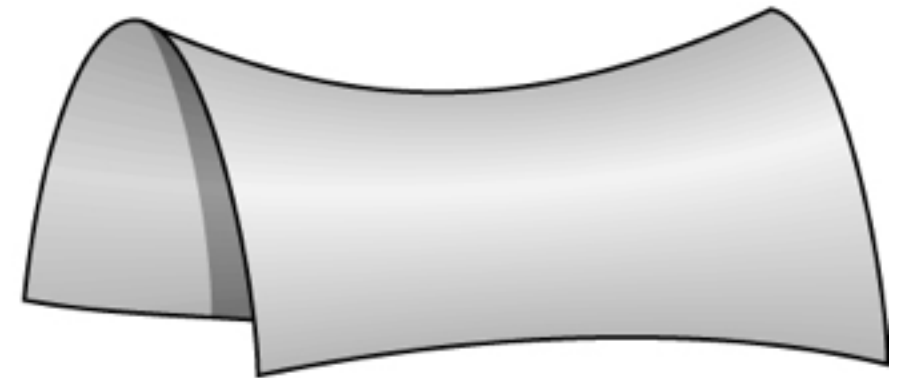
(a)

Non-Euclidean
Positive Curvature



(b)

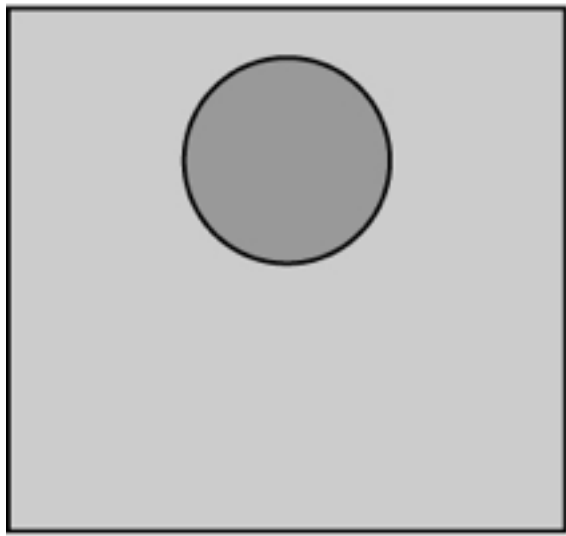
Non-Euclidean
Negative Curvature



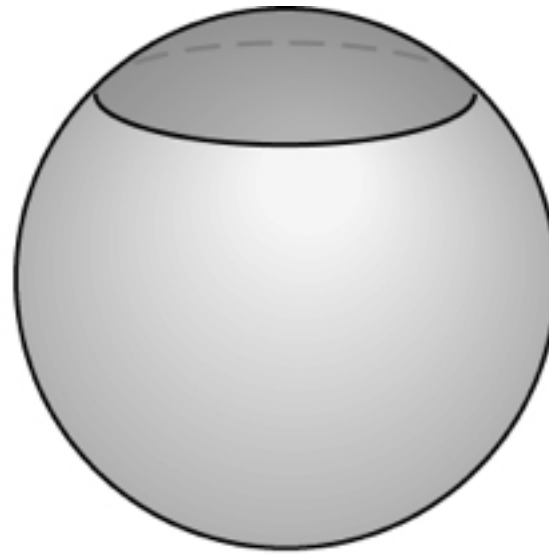
(c)

Carroll & Ostlie Figure 29.17

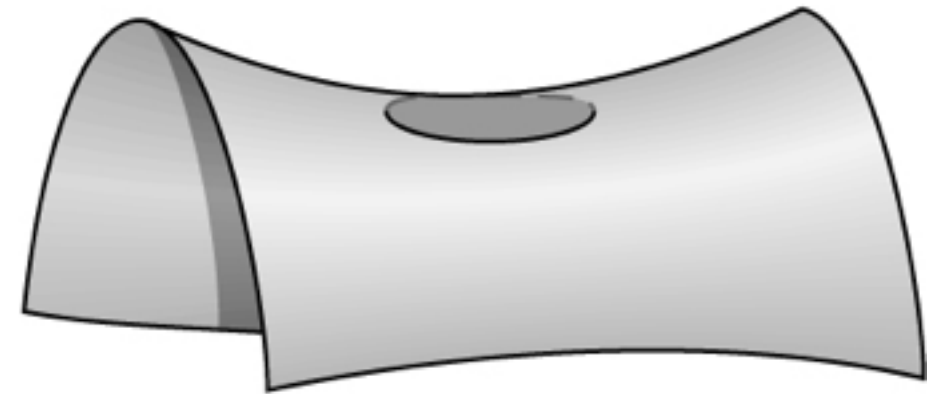
Determining the Curvature



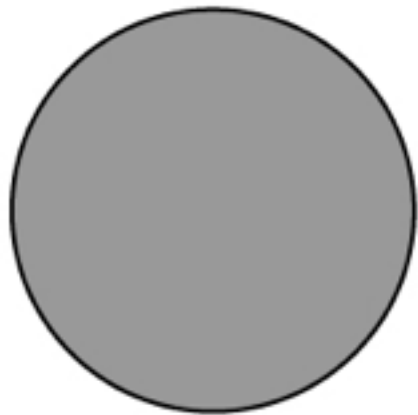
$$C = 2\pi D$$



$$C < 2\pi D$$

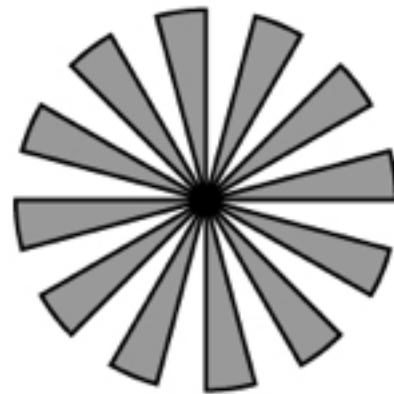


$$C > 2\pi D$$



Zero curvature

(a)



Positive curvature

(b)



Negative curvature

(c)