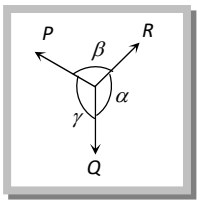
Lami's Theorem.



If three forces acting at a point be in equilibrium, each force is proportional to the sine of the angle between the other two. Thus if the forces are P, Q and R; α,β,γ be the angles between Q and R, R and P, P and Q respectively. If the forces are in equilibrium, we have,

$$\frac{P}{\sin\alpha} = \frac{Q}{\sin\beta} = \frac{R}{\sin\gamma}.$$

The converse of this theorem is also true.