

梅涅劳斯定理, Menelaus

梅涅劳斯定理, Menelaus

一条直线与 $\triangle ABC$ 的三边 BC, AC, AB 或其延长线分别交于点 D, E, F , 则

$$\frac{AF}{FB} \cdot \frac{BD}{DC} \cdot \frac{CE}{EA} = 1.$$

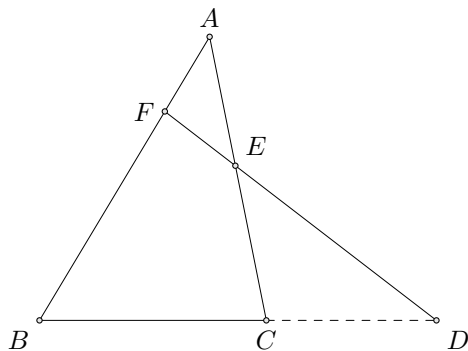


图 1.1

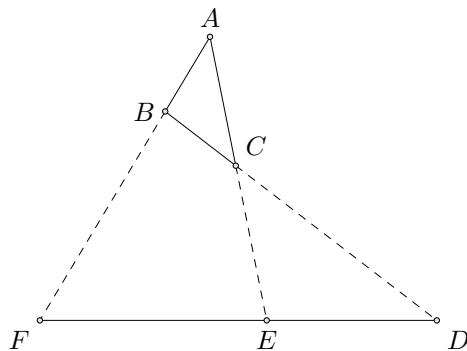


图 1.2

角元形式: 设 G 是平面上任意一点, 则

$$\frac{\sin \angle AGF}{\sin \angle FGB} \cdot \frac{\sin \angle BGD}{\sin \angle DGC} \cdot \frac{\sin \angle CGE}{\sin \angle EGA} = 1.$$

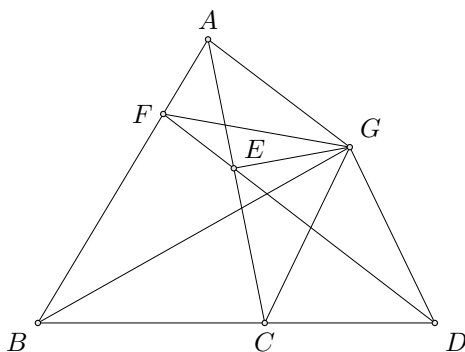


图 1.3