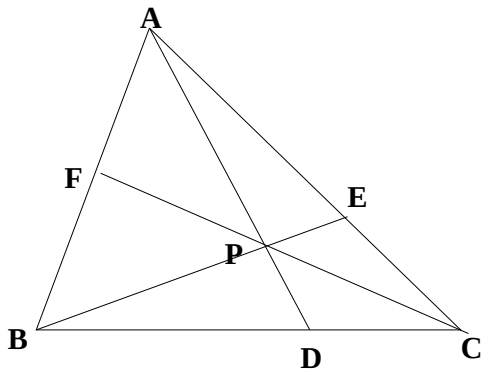
Tour 14 - Ceva's Theorem

Construct an arbitrary triangle ABC.



Pick points D, E, and F so that D is on BC, E is on AC, and F is on AB.

Ceva's Theorem states that line segments AD, BE, and CF are concurrent, i.e., they meet at a single point, if and only if

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

What an incredible result!