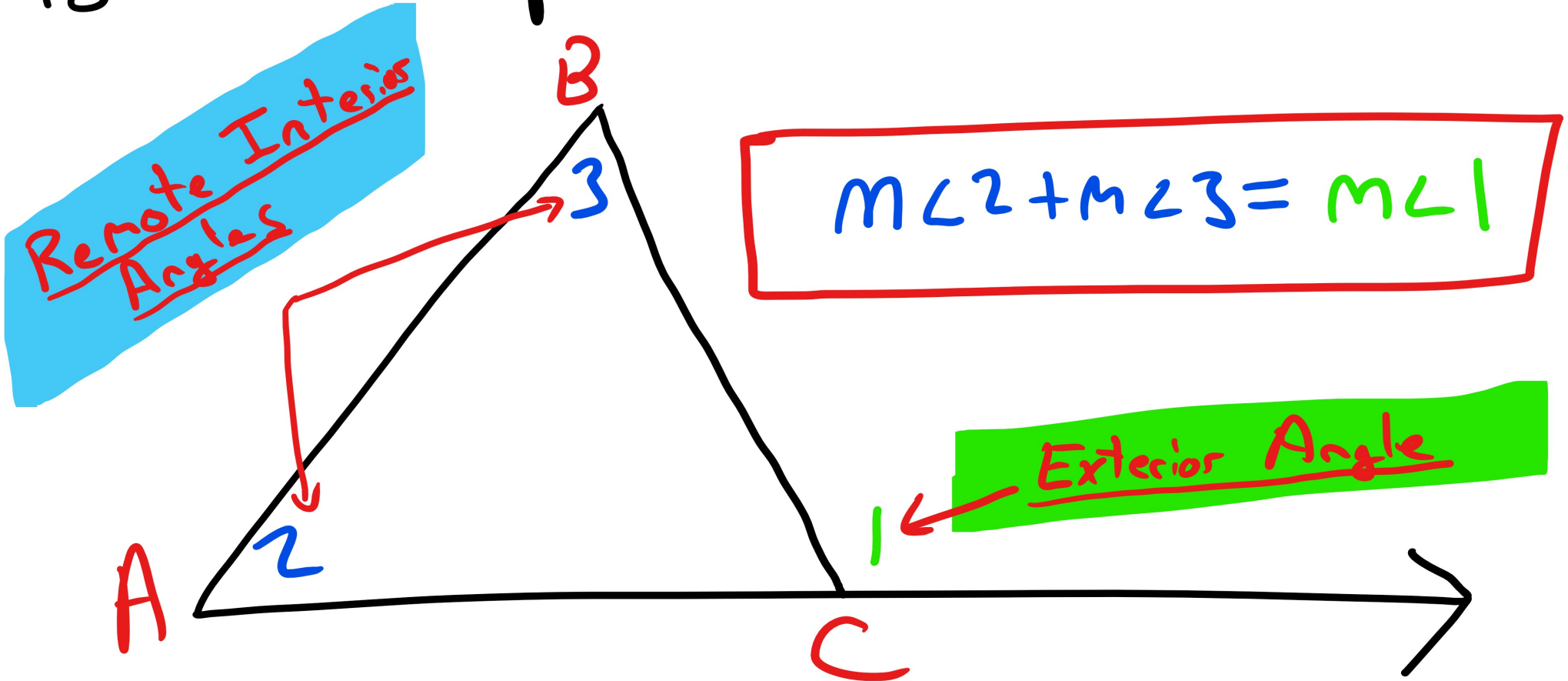


Exterior Angle Theorem

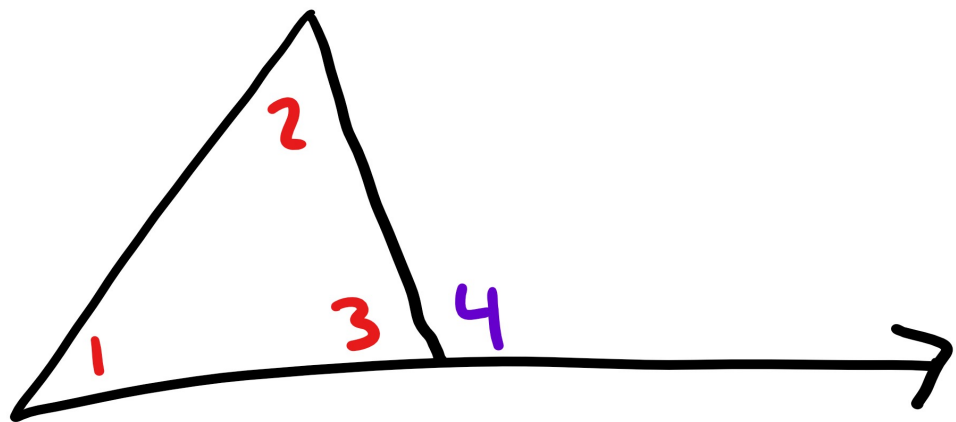
- The **Exterior Angle** of a triangle is equal to the sum of the **2 Remote Interior Angles**.



Given 2 Int. $\angle$'s
Add to find Ext. $\angle$.

Given 1 int $\angle$ & 1 ext $\angle$,
Subtract to find int $\angle$.

Why Exterior Angles = The Sum of The Remote Interior Angles



 = Exterior Angles

 = Interior Angles

$$m\angle 1 + m\angle 2 + m\angle 3 = 180^\circ$$

b/c Δ 's add to 180°

Set Equal

$$m\angle 3 + m\angle 4 = 180^\circ$$

b/c straight $\angle$

$$m\angle 1 + m\angle 2 + \cancel{m\angle 3} = \cancel{m\angle 3} + m\angle 4$$

$$m\angle 1 + m\angle 2 = m\angle 4$$