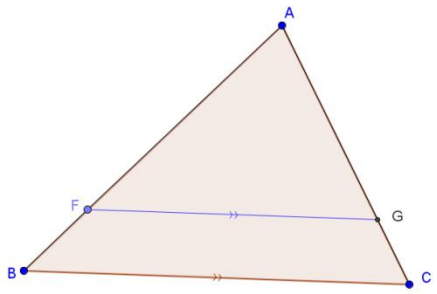
We have proven that |AF|/ |FB| = |AG|/ |GC| (Side-splitter Thm.). Think about the following:



1. Can we also say |FB| / |AF| = |GC| / |AG| ? Explain why or why not.

2. How about |AB| / |AF| = |AC| / |AG|? Does it hold? Why?

There are two ways to go about justifying (2.). First method is selecting different triangles when proving the Side-Splitter theorem. Appropriate selection of triangles will lead to (2.).

Second method is much faster. Do a simple algebraic manipulation of (1.) to get to (2.).

(2.) is referred to as Corollary to Side-Splitter theorem and it is used to prove AA theorem. Now try to prove AA: https://www.geogebra.org/m/Kbtp9k2J