1145-F5-923 Connor Thomas Ahlbach* (ahlbach@uw.edu), 1901 NE 85th St., Apt. 311, Seattle, WA 98115. Sum and Intersection of Subspaces in Introductory Linear Algebra.

In most introductory linear algebra classes, subspaces are treated as static objects. This mistreatment can be avoided by studying how subspaces interact through sum and intersection. Through studying sum and intersection of subspaces, we can correct some of the misconceptions about subspaces, motivate the utility of relation form, define complements and projection maps, build geometric intuition, and better prepare students for higher-level math and science classes. It is especially important that we educate students properly in linear algebra to prepare the future leaders in industry, where linear algebra is essential. (Received September 17, 2018)