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Martin E Flashman* (flashman@humboldt.edu). *Visualizing Complex Variable Functions with Mapping Diagrams: Linear Fractional Transformations*. Preliminary report.

Crucial to understanding much about complex variable functions is a sound comprehension of core linear fractional transformations. In a recent undergraduate complex variables course the author used GeoGebra 5.0 to create mapping diagrams for these functions in a three dimensional setting. The diagrams are modeled after mapping diagrams for real variable functions. Several visual features of these functions and their complex integrals will be illustrated that can add to the understanding of these core functions. The diagrams will be available for use over the internet. (Received September 04, 2015)