Instructional Flow – Unit 7 Similarity Dilations and Scale Factors 8.1 dilations in the coordinate plane • • dilations of polygons 8.2 **Similar Polygons** the polygon similarity postulate • indirect measurement • **Golden Connections** 11.1 the Golden Ratio and its derivation • • applications ╈ 8.3 **Triangle Similarity** • triangle similarity postulates (AA, SSS, SAS) The Side-Splitting Theorem 8.4 proportionality of segments created by a line parallel to a side of a triangle • that cuts the other two sides **Indirect Measurement and Additional Similarity Theorems** 8.5 proportional medians, altitudes, angle bisectors, and segments • applications • IG **Geometric Mean** • definition and computation IG Altitude to the Hypotenuse of a Right Triangle theorems and corollaries • geometric interpretation of the geometric mean • 8.6 **Area and Volume Ratios** ratio of areas and volumes of similar figures • • the effect of changing linear dimensions on area and volume (Optional Enrichment) Fractal Geometry 11.6

• self-similarity and iteration