Dilation is equal to 5 and side

DilationDilation has been used for millions of years.

Even in the ancient times and still we use it until this day. An example of dilation used in ancient times is when ancient Egyptians built the pyramids. The pyramids were built in different sizes, but proportional. Now in this day and time we use dilation in many aspects. Dilation is used in both science and math. In science the microscope shows dilation, without microscopes many of the scientific discoveries wouldn't be possible! In math dilationmainly is used in Geometry to draw figure of different sizes in proportional sizes.

Inart dilation is used widely for, example architecture, paintings, and statues. In oureveryday life we have many examples of dilation like, binoculars, toy cars, little ornaments that represent larger ones in a smaller version. This involves the use of dilations, that is, transformations of the plane that are either contractions or expansions about a point (the center of the dilation), by a constant (positive) ratio. A dilation can either be an expansion (if the ratio is larger than one) or a contraction (if it is smaller than one). Look at the figure below. Construct a point C in the plane, and mark it as the center of dilation.

Now draw any polygonal figure, and dilate it about the center C by a fixed ratio (1/2, or 3, or whatever). Drag around this polygon, and observe how the image changes. In particular look at the vertices, their images and the center. Can you see any relation among them? To find the scale factor we have to add one side of both corresponding sides and divide them by the

corresponding side of the preimage. For example, side A for the preimage is equal to 5 and side A for the image is equal to 10.

Thus, 5+10/5 so the scale factor will equal 3!!!! Preimage ImageWhen I first learned about dilation, I thought that is wasn't important and that there was no use for it at all, but doin this project made my perspective of dilation and Geomety change. Dilation is important. I have learned that dilation isn't used in just Geometry, it is used in science, math, art, and our everyday life. Dilation is used everywhere, without you even realizing it, but hopefully after reading this you have realized that we need dilation.