MAT 222-840 Discussion Questions for Chapter 8

Due: 6/21/17 at 4:00PM

Instructions: Your answers to the following questions do not need to be lengthy or written in complete sentences, but should reflect preparation for our discussion about Chapter 8 at the beginning of class.

Questions:

- 1. What are the mathematical terms for slides, flips, and turns?
- 2. What is the result of the composition of the translations $(x, y) \rightarrow (x + 4, y 3)$ and $(x, y) \rightarrow (x 4, y + 3)$? How would you describe the relationship between these two translations?
- 3. If a point on the preimage of a figure lies on the line of reflection, what do you know about its reflection image?
- 4. If you draw a figure on paper and cut it out, how can test it for lines of symmetry?
- 5. If you draw a figure on paper and cut it out, how can test it for rotational symmetry?
- 6. If a figure is dilated with the origin as the center of dilation, what will be the image of a point (*x*, *y*) on the figure if the scale factor is *n*?
- 7. Which types of isometries preserve the orientation of a figure? Which reverse the orientation?

MAT 222-840 **Discussion Questions for Chapter 8**

Summer 2017

Muddiest Point:

What questions do you have about the notes you took in Chapter 8, or anything from this week?



MML Homework Questions:

Are there any MML homework problems from Chapter 8 that you would like to discuss?