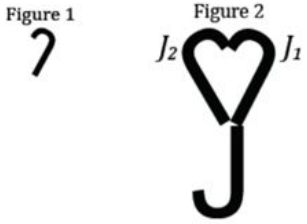
Lesson 2.3.1: Similarity Transformations

Targets:

1. I can define "similarity transformation."
2. I can identify whether two figures are similar or not.

Warm Up

Observe Figures 1 and 2 and the images of the intermediate figures between Figures 1 and 2. Figures 1 and 2 are called *similar*. What observations can you make about Figures 1 and 2?



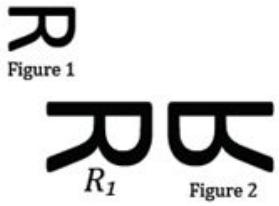
Vocabulary

Watch the warm up video and copy the vocab notes here:

Similarity Transformations	Similar

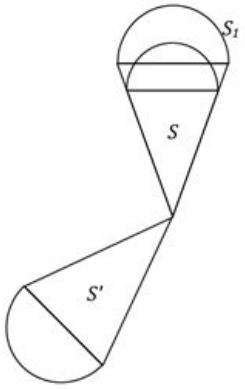
Practice 1

Figure 1 is similar to Figure 2. Which transformations compose the similarity transformation that maps Figure 1 onto Figure 2?



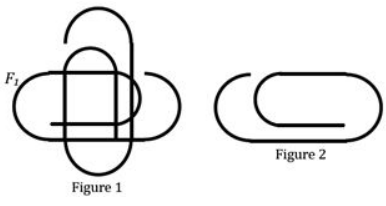
Practice 2

Figure S is similar to Figure S'. Which transformations compose the similarity transformation that maps S onto S'?



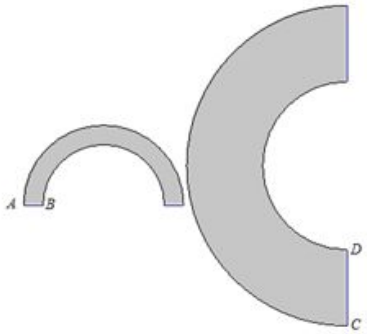
Practice 3

Figure 1 is similar to Figure 2. Which transformations compose the similarity transformation that maps Figure 1 onto Figure 2?



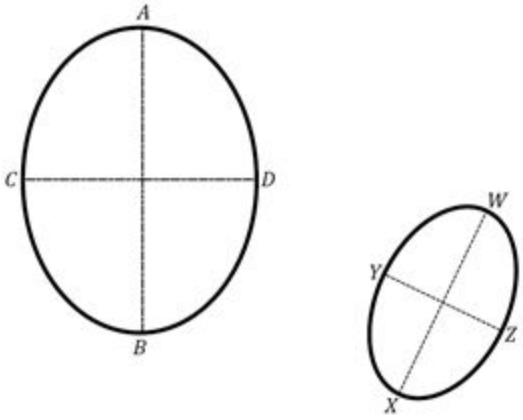
Practice 4

Show that no sequence of basic rigid motions and dilations takes the small figure to the large figure. Take measurements as needed.



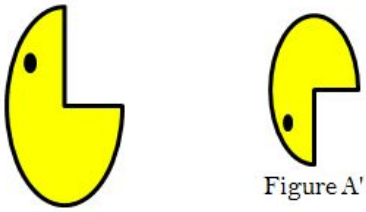
Practice 5

Is there a sequence of dilations and basic rigid motions that takes the large figure to the small figure? Take measurements as needed.



Exit Ticket

1. Figure A' is similar to Figure A. Which transformations compose the similarity transformation that maps Figure A onto Figure A'?



2. Is there a sequence of dilations and basic rigid motions that takes the small figure to the large figure? Take measurements as needed.