Geometry – Unit 2 Practice **Name: _____!**

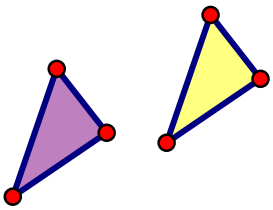
Recognizing Types of Transformations

G.CO.A.2 **Date: _____ Pd: ____**

Quick Concept: To recognize different transformations in the plane - **reflection** (flip), a **rotation** (turn), a **translation** (slide), a **dilation** (enlarge/reduce), a **stretch** (distortion). There are other transformations that can affect shapes in the plane but these are the major ones that we will investigate this year.

1) Determine the type of transformation that has taken place. (reflection, rotation, translation, dilation, stretch).

a)



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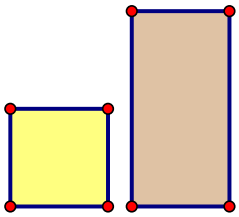
b)



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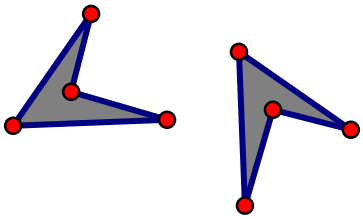
c)



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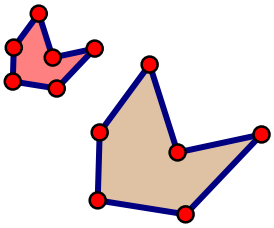
d)



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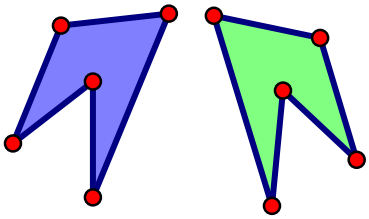
e)



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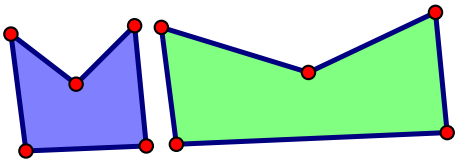
f)



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2. Given the pre-image, match the image to the given transformation.

Pre-Image

a) ROTATION _____

b) TRANSLATION _____

c) STRETCH _____

d) DILATION _____

e) REFLECTION _____

f) OTHER _____

Image 1

Image 2

Image 3

Image 4

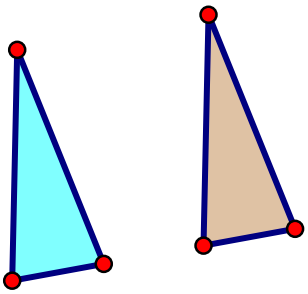
Image 5

Image 6

Image 7

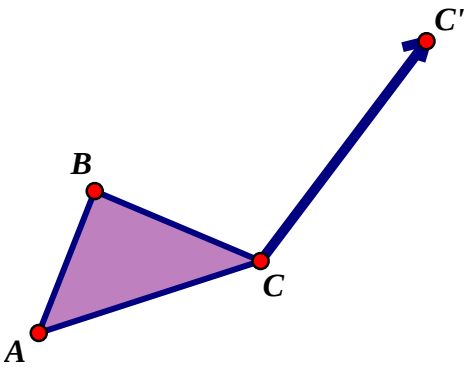
Image 8

3. A teacher draws this picture on the board and then asks Jennifer what transformation took place in this case. Jennifer pauses because she thinks there is more than one answer. Which transformations does Jennifer think would work here?

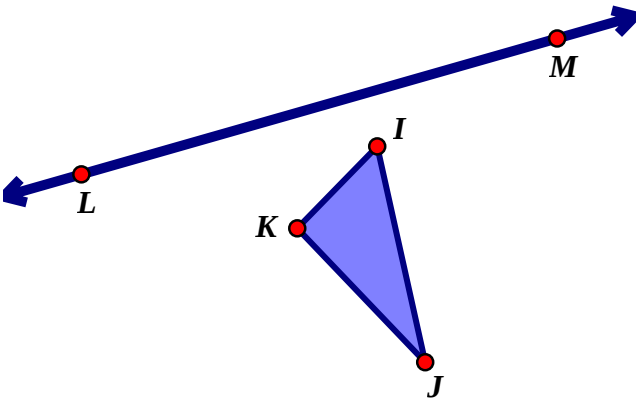


4. Use a piece of patty paper to copy the pre-image and then perform the given transformation.

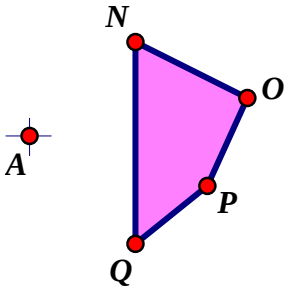
a) Translate by Vector $\overrightarrow{CC'}$



b) Reflect ΔIJK over $\overleftrightarrow{LM}$



c) Rotate Quad. NOPQ by 90° about Point A.



d) Reflect ΔIJK over $\overleftrightarrow{LM}$