

Geometry, Ch 4-3 Exer. pg 227 #1-8, 10-13

1. What are the three types of rigid motion transformation?

- ① Translations (or slides)
- ② Reflections (or flips)
- ③ Rotations

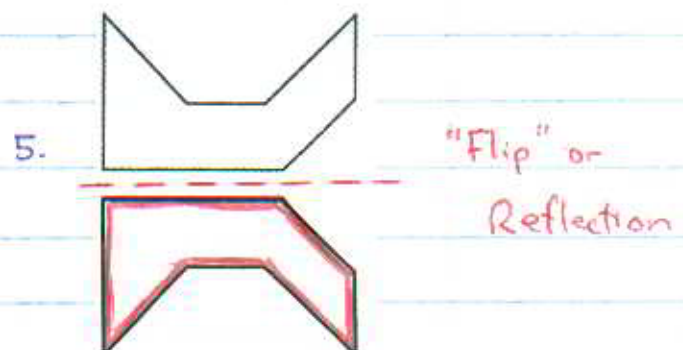
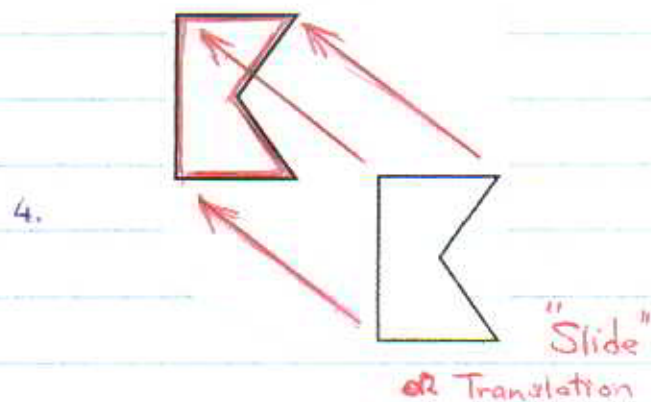
2. Why is a transformation that maps one figure onto a congruent figure called rigid?

Rigid transformations preserve length and angle measure. A non-rigid transformation would be a reduction or enlargement.

Identify the transformations used to move the blue figure to the red figure.

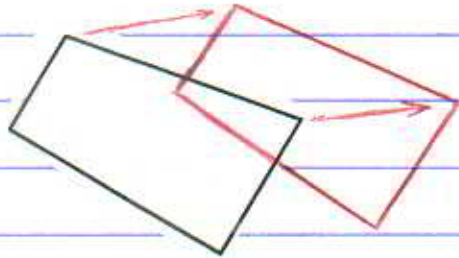


Rotation

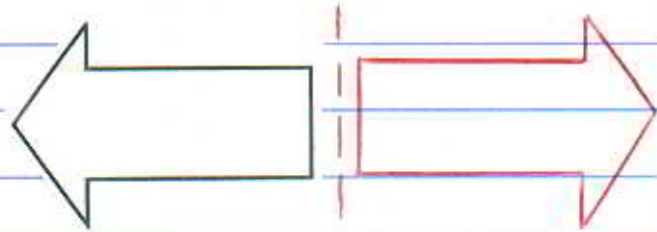


Copy the figure. Draw an example [many correct answers] of the effect of the given transformation.

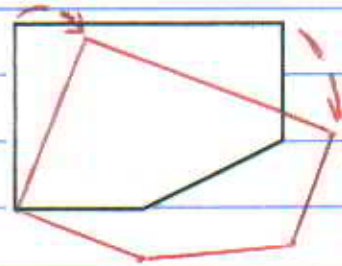
6. Translation



7. Reflection

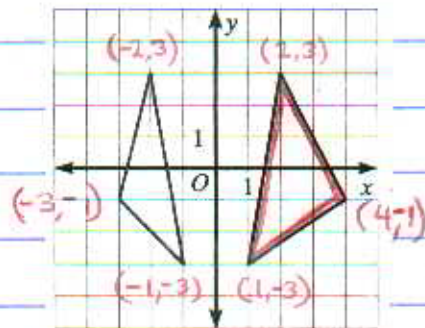


8. Rotation



Tell whether a rigid motion can move the blue figure to the red figure. If so, describe the transformation(s)

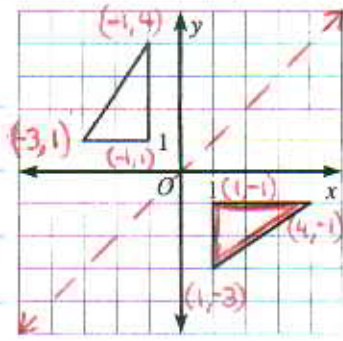
10.



This looks very close to being a Reflection [or Flip] across the y -axis.

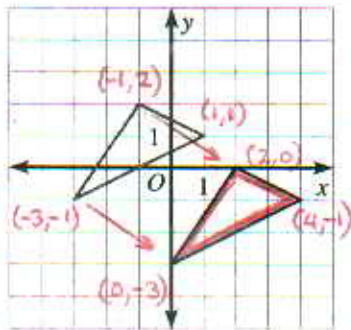
It is not a transformation because the side lengths are not congruent.

11.



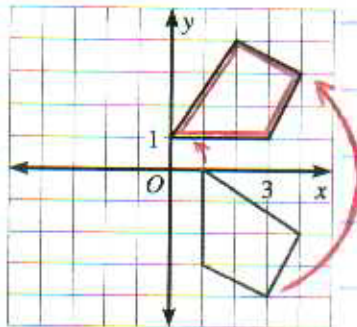
This is a Reflection, or Flip,
across the line $y=x$.

12.



This is a Translation, or Slide,
down 2 units, then to the
right 3 units.

13



This is a Rotation