**Unit 2 Review Questions**

Name: Key

1- If the reflection of point A across line m is the point A', then line m is the perpendicular bisector of AA'

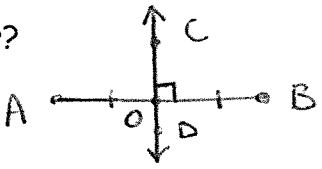
Where A is the pre-image and A' is the image

2- The composition of two reflections across parallel line is a Translation

3- The composition of two reflections across intersecting line is a Rotation

4- What is a perpendicular bisector?

Cuts a line in half
make a 90° angle




$\angle COA = \angle COB$
$\overline{AO} = \overline{BO}$

5- What is rigid transformation?

Transformation that reserve the shape and the size of an image. It only change position.

6- What is the difference between a pre-image and an image and how do we label them?

Pre-image → before transformation ex: A
image → After Transformation ex: A'
→ use (')

7- What is rotation? What are the main parts involved in rotating an image?

Rotation is Turning The image
- Center of rotation
- direction (clockwise or Counter clock)
- Angle of rotation (90°, 180°, ....)

8- Define translation and reflection

Translation → Slide
Reflection → Flip

9- Which of the following transformations does not result in a congruent figure?

(a) dilation (c) reflection
(b) rotation (d) translation

* dilation → Shrink or Enlarge image

10 -The pre-image and image of what transformation is congruent?

A. Reflection and dilation

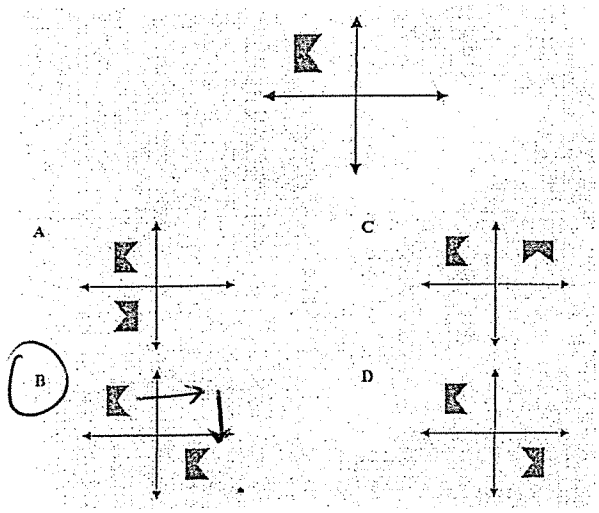
C. dilation

B. Translation, Reflection, and Rotation

rotation

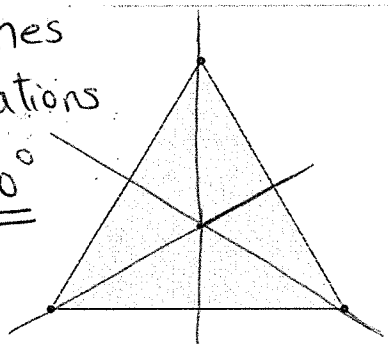
D.

11-Which represents a translation of the figure?

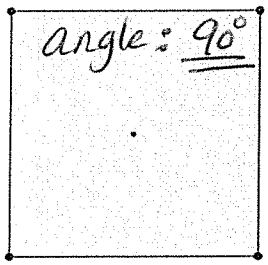


12- For each one of the polygons below, find how many lines of symmetry to they have and the angle of rotation

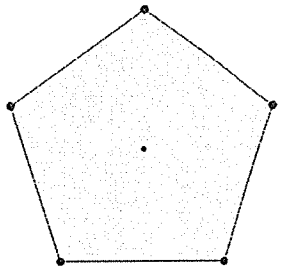
3 lines
3 rotations
angle: 120°



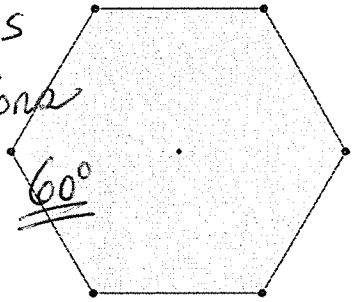
4 lines
4 Rotations
angle: 90°



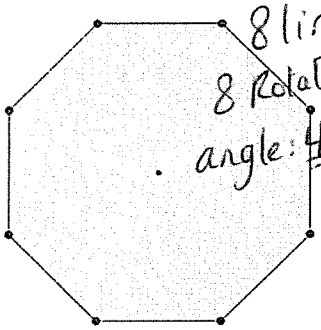
5 lines
5 Rotations
angle: 72°



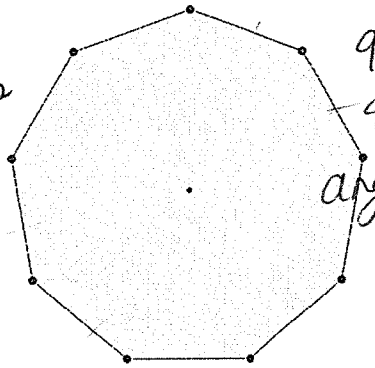
6 lines
6 Rotations
angle: 60°



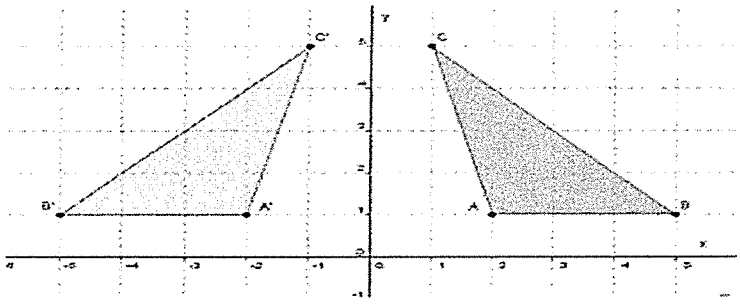
8 lines
8 Rotations
angle: 45°



9 lines
9 Rotations
angle: 40°



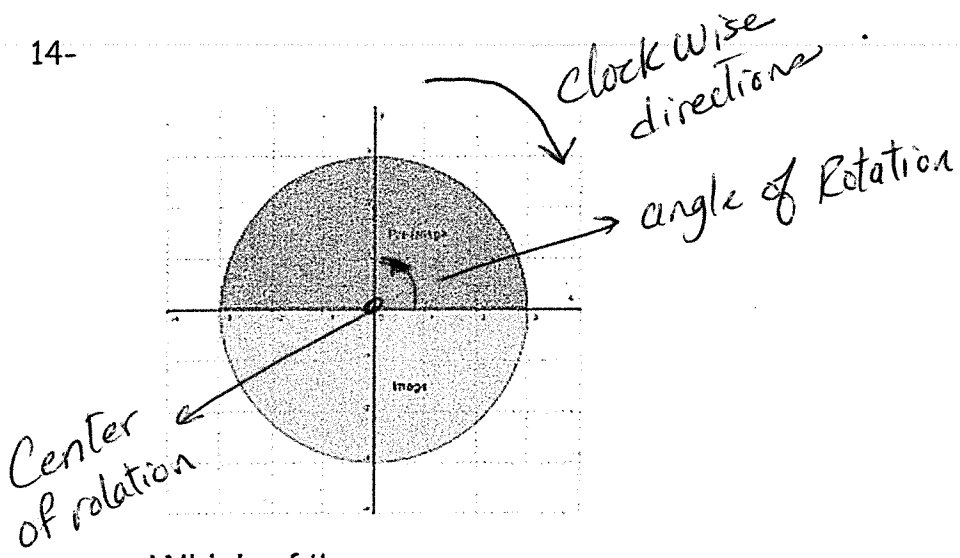
13-




Which of these describes the transformation of the triangle?

a. Reflection over the x-axis
b. Reflection over the y-axis
c. Rotation of 90° clockwise about the origin
d. Rotation of 180° clockwise about the origin

14-

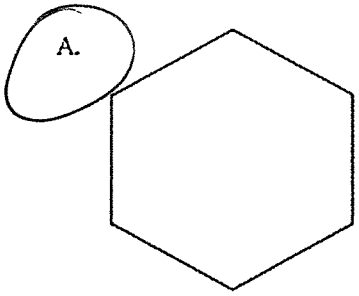



Which of these transformations could produce the image shown?

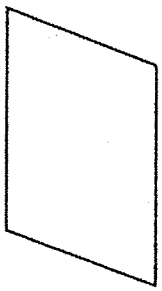
a. dilation
b. glide reflection
c. rotation
d. translation

15- Which figure has a line of symmetry and rotational symmetry?

A.



B.



C.