

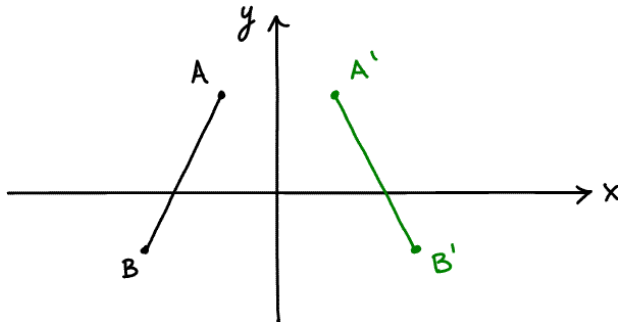
- *15 questions
- *Calculators allowed
- *Show all work/steps- use separate paper
- *Recommend time frame 30min -45min

Provide complete explanations in your responses.

Reflections

1. The figure shows a line and it's reflection across the y-axis.

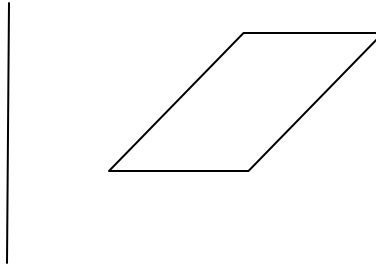
if the distance between AA' is 17 units, how far is A to the y – axis?



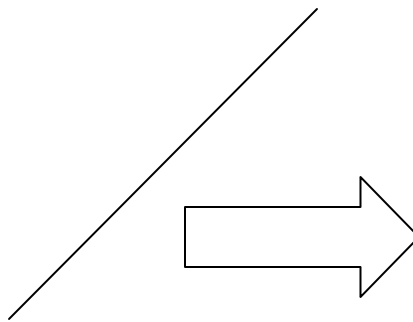
2. Define isometry.
3. Draw the reflection of the image across the axis.



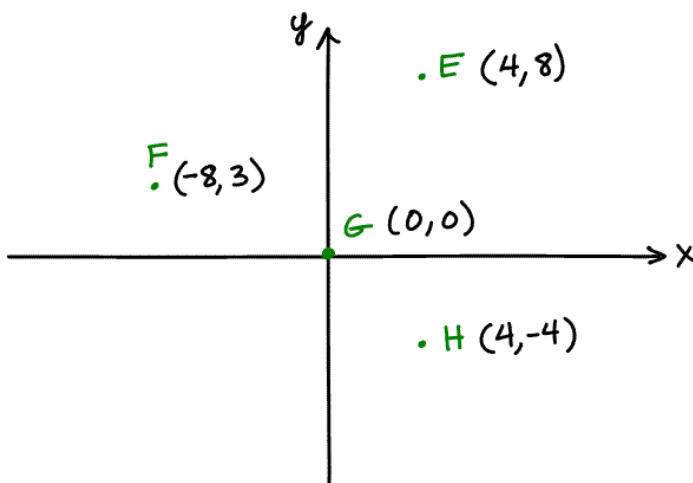
4. Draw the reflection of the image across the axis.



5. Draw the reflection of the image across the axis.

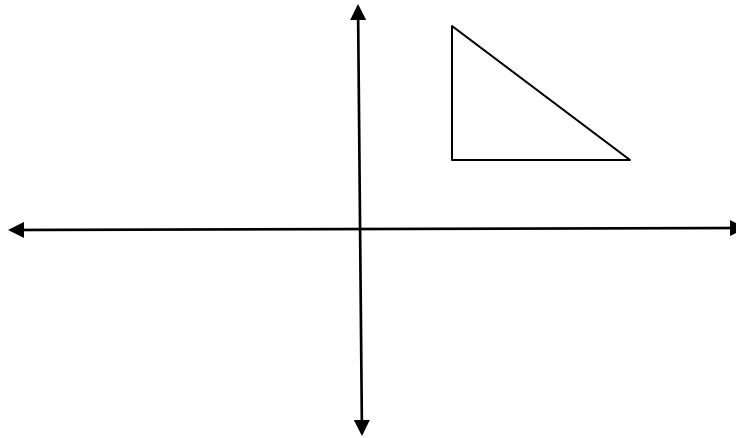


6. Reflect each point across the x-axis and label the coordinate of each reflected image.

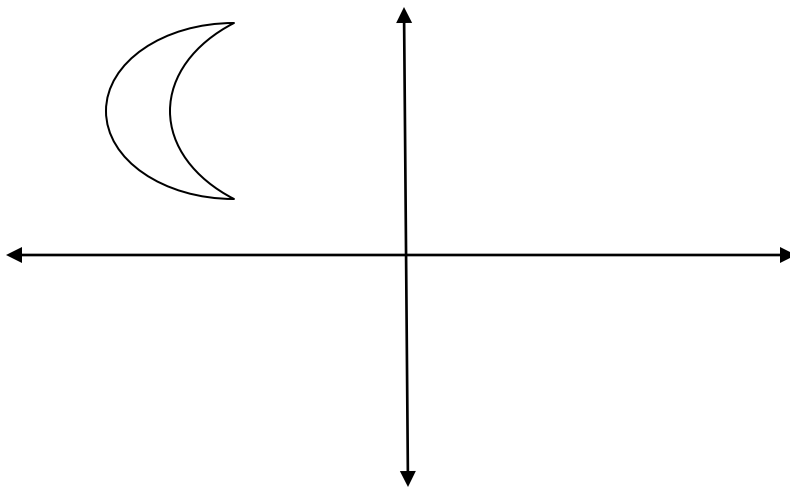


Rotations

7. Rotations are transformations that rotate an image in a _____ or _____ direction.
8. Rotate the point $(2, 8)$ 180° *clockwise* - what is the coordinate of the rotated image?
9. Sketch the image of the figure after being rotated *clockwise* 90°

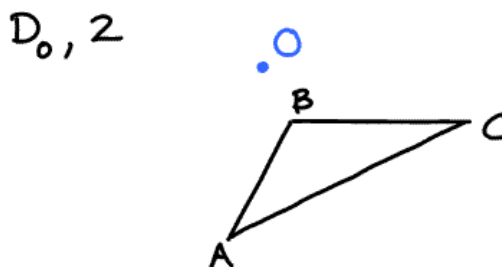


10. Sketch the image of the figure after being rotated *counterclockwise* 270°



Dilations

11. Dilations are transformations that create images that are _____.
12. For a dilation to be an expansion the scale factor has to be greater than _____.
13. Sketch the dilation of the image.



Translations and Glide Reflections

14. Translate the point $(3, 10)$ using the translation $T: (x, y) \rightarrow (x + 7, y - 14)$

15. Draw the image of the glide reflection described; label the vertices of the reflected image.

Glide: all points up 10 units and left 10 units.

Reflect: all points across the x-axis

