

Name _____ Date _____

Paper Snowflakes Reflections

Vocabulary

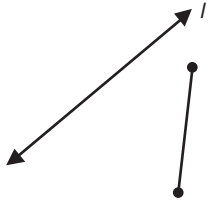
Describe similarities and differences between each pair of terms.

1. image and preimage
2. reflection about the y -axis and reflection about the x -axis
3. isometry and reflection
4. transformation and reflection about the line $y = x$
5. reflection and line of reflection

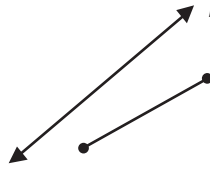
Problem Set

Use a compass and a protractor to reflect each line segment across line l .

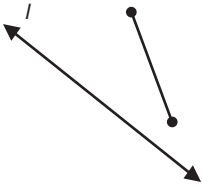
6.



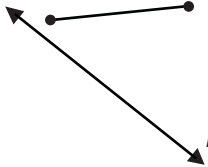
7.



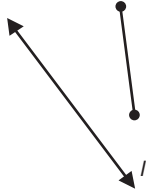
8.



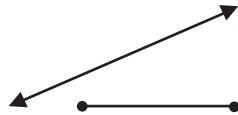
9.



10.

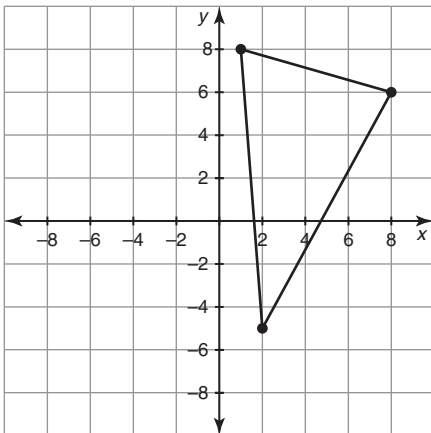


11.

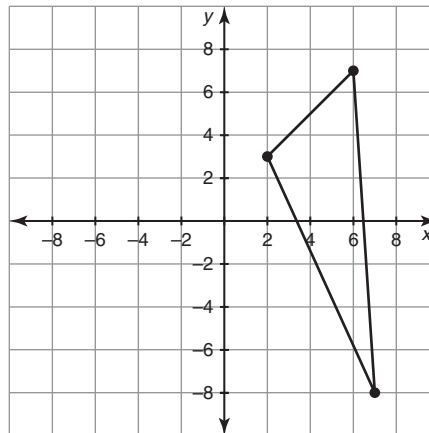


Reflect each triangle about the y -axis. Draw the image and give the coordinates of each of its points.

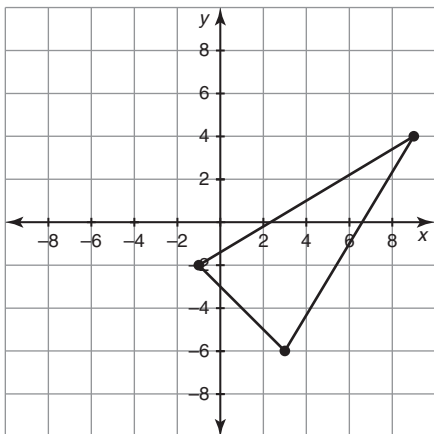
12.



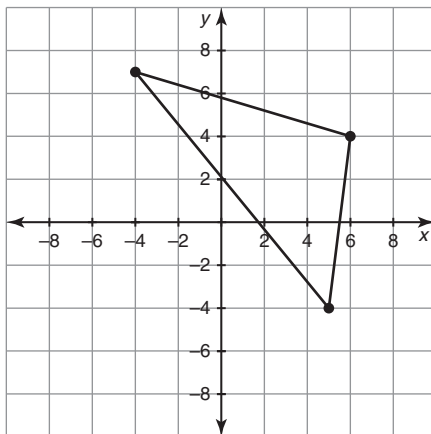
13.



14.

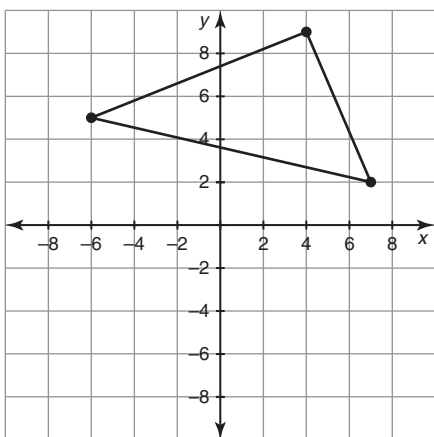


15.

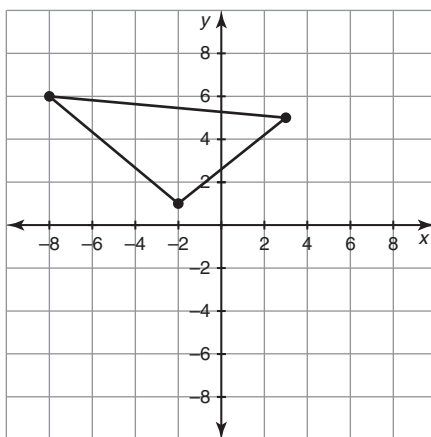


Reflect each triangle about the x -axis. Draw the image and give the coordinates of each of its points.

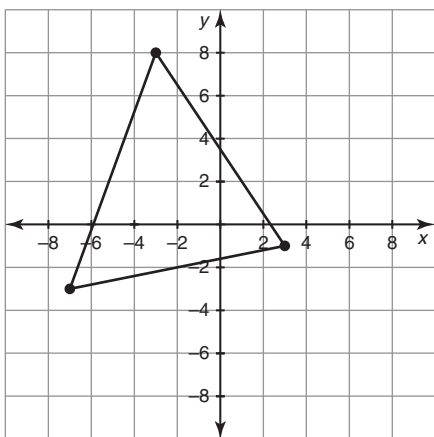
16.



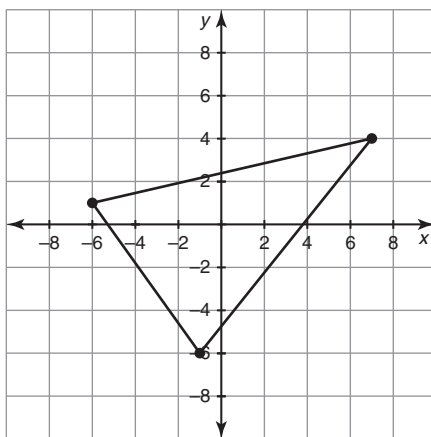
17.



18.

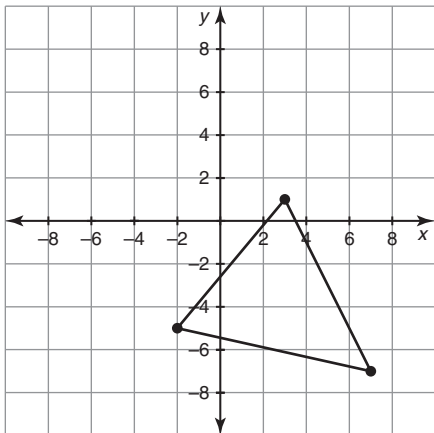


19.

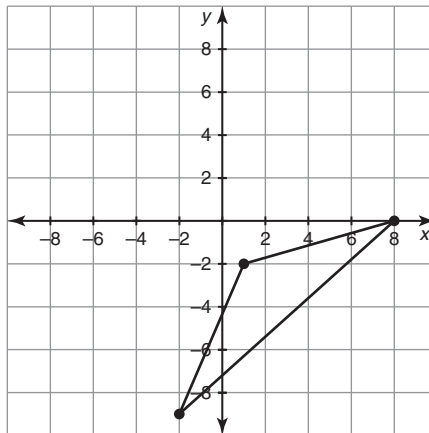


Reflect each triangle about the line $y = x$. Draw the image and give the coordinates of each of its points.

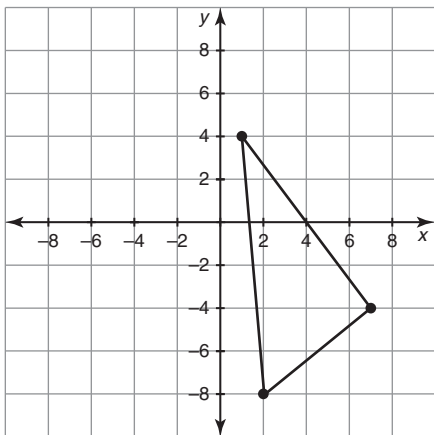
20.



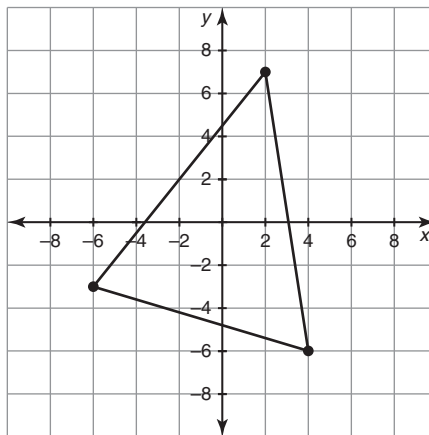
21.



22.



23.



Determine the coordinates of the given point after it is reflected about the x -axis, after it is reflected about the y -axis, and after it is reflected about the line $y = x$.

6

24. $A(8, -3)$

25. $B(-6, 4)$