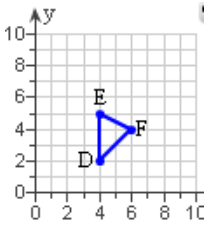
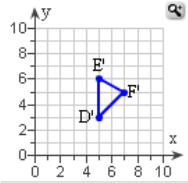
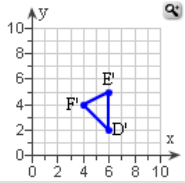
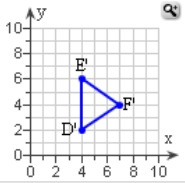
Chapter 9 Review -8th grade **Name: _____Per._____**

1. Which graph could be a translation of △DEF?

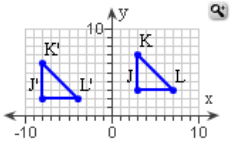


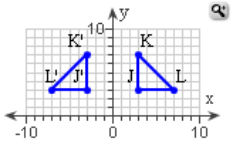
○A. 

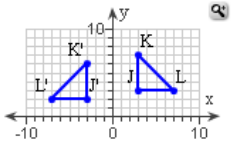
○B. 

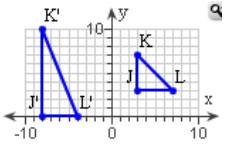
○C. 

2. △JKL has vertices J(3,3), K(3,7), and L(7,3). Which graph shows △JKL and △J'KL', its image after a translation?

○A. 

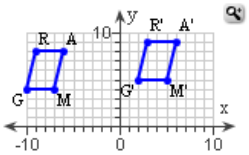
○B. 

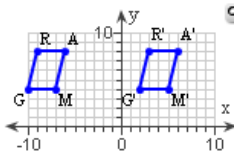
○C. 

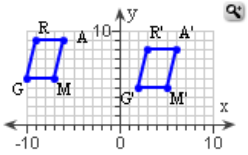
○D. 

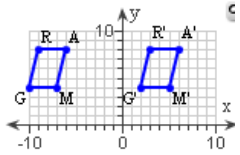
3. The coordiantes of △DEF are D(4,3), E(6,3), and F(5,6). If you translate△DEF 2 units left and 3 units up, what are the coordiantes of E'?

4. The vertices of parallelogram GRAM are G(– 10,4), R(– 9, 8), A(– 6,8), and M(– 7 ,4). Graph GRAM and G'R'A'M', it's image after a translation 12 units right and 1 unit up.

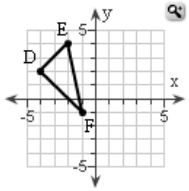
○A. 

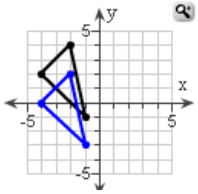
○B. 

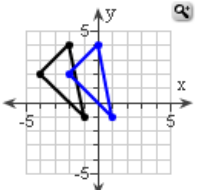
○C. 

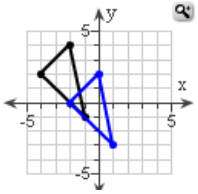
○D. 

5. Use the translation (x,y)→(x + 2, y – 2) to graph the image of △D'E'F'.

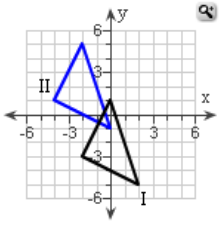


○A. 

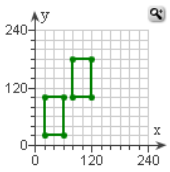
○B. 

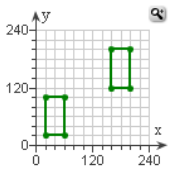
○C. 

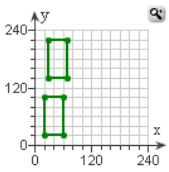
6. Figure II is a translation image of Figure I. Write a rule to describe the translation.



7. The rectangle describes a plot of land. There is another plot of land 140 yards East and 100 yards north of the original plot. Which graph represents the plot of Land?

○A. 

○B. 

○C. 

7a. What is the combined area of the plots?

8. Describe the location of the image of the figure under the given translation. (x,y)→(x + 4, y + 2).

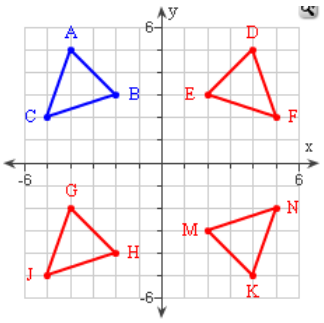
○A. The image is down and to the left.

○B. The image is up and to the right.

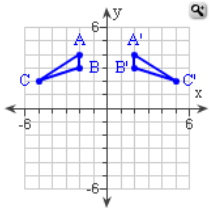
○C. The image is down and to the right.

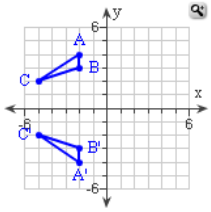
○D. The image is up and to the left.

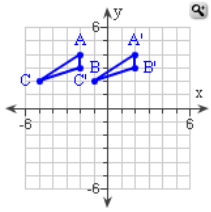
9. Which of these triangles are reflections of △ABC?



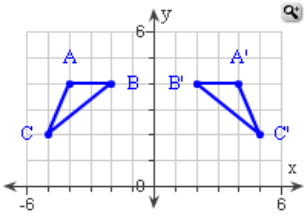
10. Which graph shows △ABC and its reflection across the y-axis?

○A. 

○B. 

○C. 

11. Describe in words how to map △ABC to its image △A'B'C'.



○A. ΔA'B'C' is the image of ΔABC after a reflection across the y-axis.

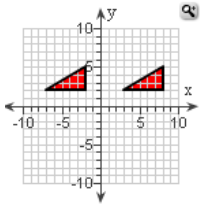
○B. ΔA'B'C' is the image of ΔABC after a reflection across the line $x = -2$.

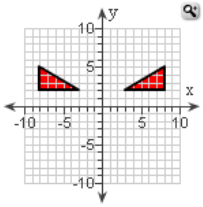
○C. ΔA'B'C' is the image of ΔABC translated 2 units horizontally.

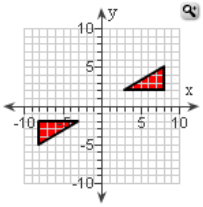
○D. ΔA'B'C' is the image of ΔABC after a reflection across the x-axis.

12. The vertices of △ABC are A(– 2,5), B(– 2, 3), and C (– 5,2). If △ABC is Reflected across the y-axis to produce △A'B'C', find the coordinate of vertex B'.

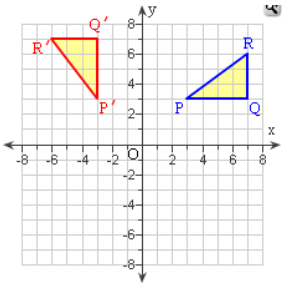
13. Which graph shows a transformation that is a rotation?

A 

B 

C 

14. What is the angle of rotation about the origin, that maps △PQR to △P'Q'R'?



○A. 180°

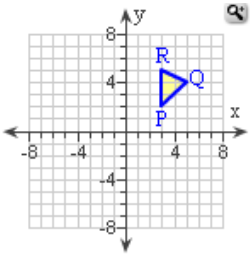
○B. 90°

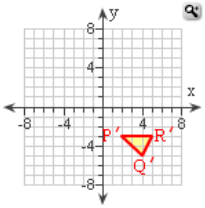
○C. 360°

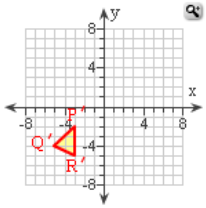
○D. 270°

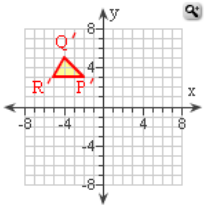
15. Point P has coordiantes (3,2). If you rotate P 270° about the origin, what are the coordinates of P?

16. Rotate △PQR 180° about the origin.



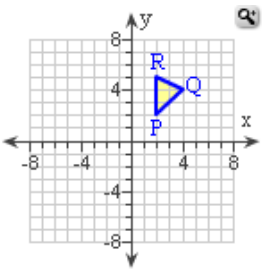
○A. 

○B. 

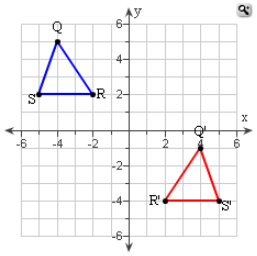
○C. 

17. Suppose △PQR is rotated 90° about the origin. Find the coordinates of P', Q', and R'.

P': **Q':** **R':**

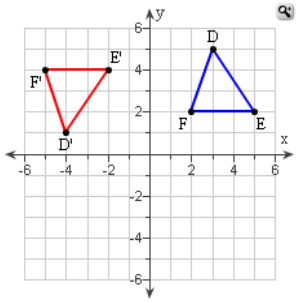


18. Given ▲QRS ≅ to ▲Q'R'S', describe a pair of rigid motion that maps ▲QRS to ▲Q'R'S'.



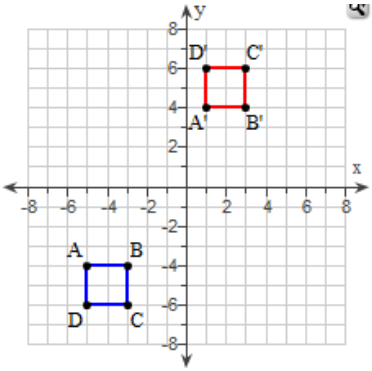
- A. Translation of 10 units right, translation of 6 units down
- B. Reflection across the y-axis, translation of 10 units down
- C. Rotation of 90° about the origin, translation of 6 units up
- D. Reflection across the y-axis, translation of 6 units down

19. Is ▲DEF ≅ ▲D'E'F'?



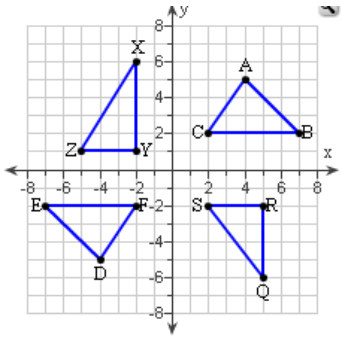
- A. Yes, because a translation of 6 units down and 7 units right, followed by a reflection across the y-axis, maps ΔDEF to ΔD'E'F'.
- B. Yes, because a reflection across the x-axis, followed by a translation of 7 units left and 6 units up, maps ΔDEF to ΔD'E'F'.
- C. Yes, because reflections across the y-axis and the x-axis, followed by a translation of 7 units left, map ΔDEF to ΔD'E'F'.
- D. No, because a sequence of rigid motions does not map ΔDEF to ΔD'E'F'.

20. Given ABCD ≅ A'B'C'D' , describe a pair of rigid motions that maps ABCD to A'B'C'D'.



- A. Reflection across the x-axis, translation 8 units up
- B. Translation 8 units up, translation 10 units left
- C. Translation 8 units down, translation 10 units right
- D. Reflection across the x-axis, translation 6 units right

21. Which two triangles are congruent?



- A. ΔABC ≅ ΔDEF
- B. ΔXYZ ≅ ΔDEF
- C. ΔQRS ≅ ΔXYZ
- D. ΔABC ≅ ΔQRS