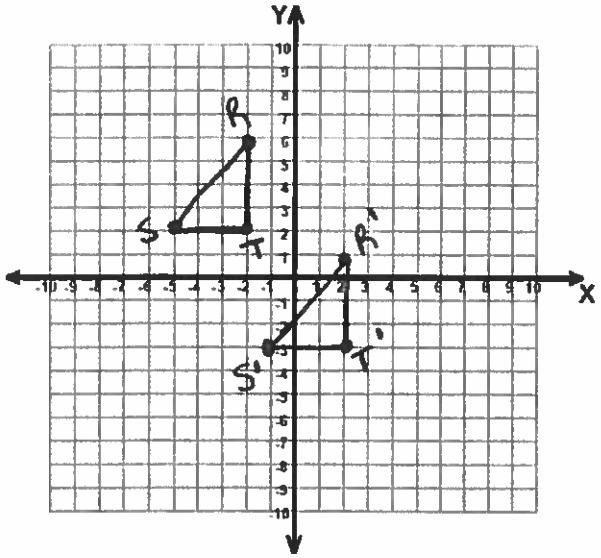
Transformations TEST Review

Name:_____

1.) Which rule was used to create △ R'S'T'?



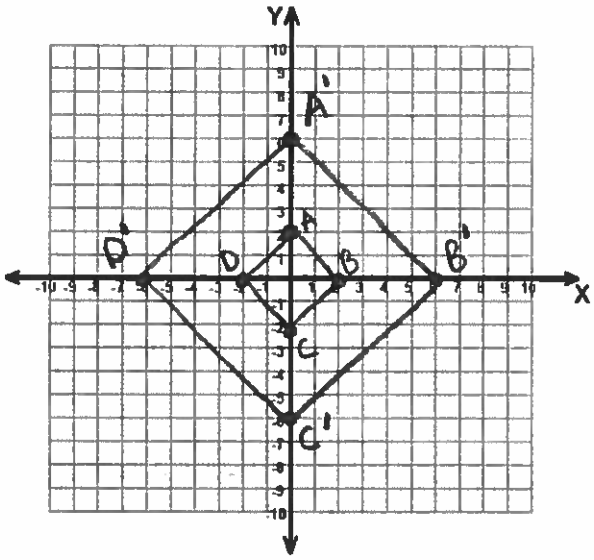
a.)(x, y) → (2x , 2y)

c.) (x, y)→ (x + 4 , y -5)

b.) (x, y)→ (0.5x , 0.5y)

d.) (x, y)→ (x - 4 , y +5)

2.) Quadrilateral ABCD was dilated with the origin as the center of dilation to create A'B'C'D' .



Which rule best represents the dilation that was applied?

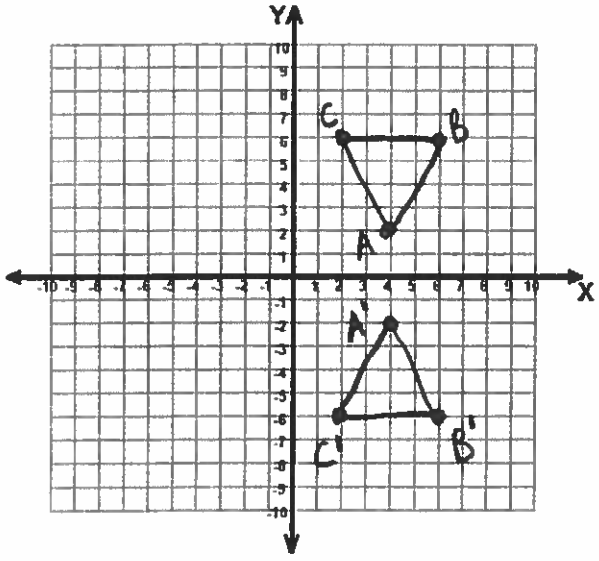
a.)(x, y) → (3x , 3y)

c.) (x, y)→ (x + 3 , y -2)

b.) (x, y)→ (1/3x, 1/3y)

d.) (x, y)→ (x - 2 , y +3)

3.) Which rule describes the transformation that was applied to the figure that is graphed below?



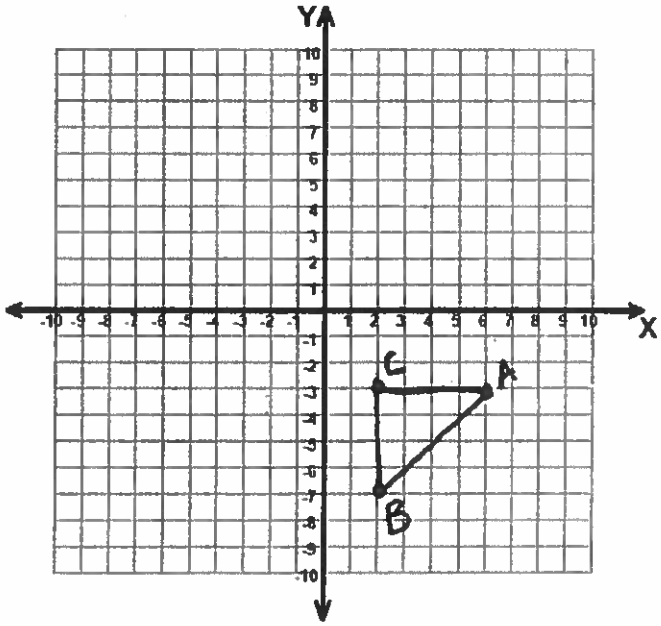
a.)(x, y) → (4x ,-4y)

c.) (x, y)→ (y, -x)

b.) (x, y)→ (-x , y)

d.) (x, y)→ (x , - y)

4.) What would the coordinates of C' be if you rotated △ABC 180° clockwise? C (2 , -3)



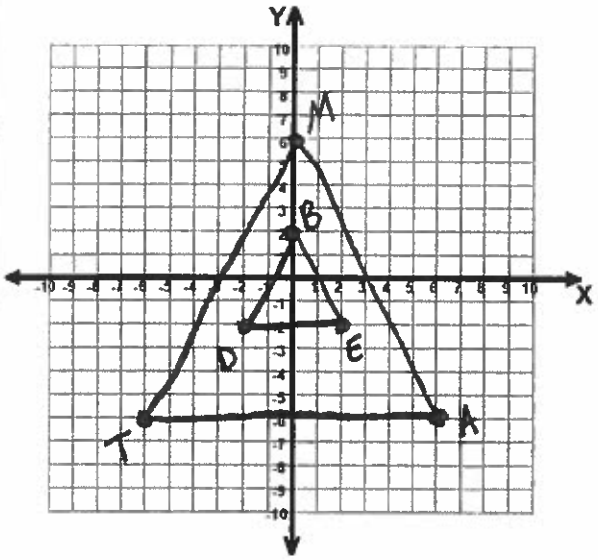
a.) (-3 , 2)

c.) (-2 , 3)

b.) (2 , 3)

d.) (2 , -3)

5.) Triangle MAT was dilated with the origin as the center of dilation to create triangle BED.

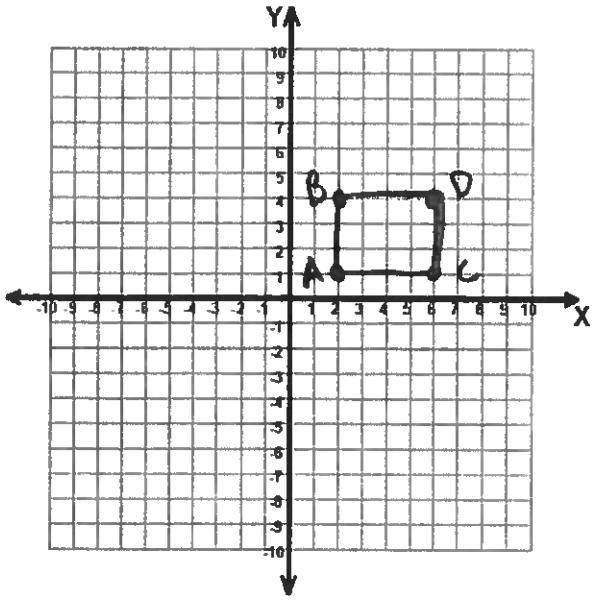


Which rule best represents the dilation that was applied to triangle MAT to create triangle BED?

a.)(x, y) → (x + 2 , y -3) c.) (x, y) →(3x , 3y)

b.) (x, y)→ (x -1 , y) d.) (x, y)→ (1/3x , 1/3y)

6.) What would the new coordinates be for A'B'C'D' if ABCD was reflected over the x-axis?

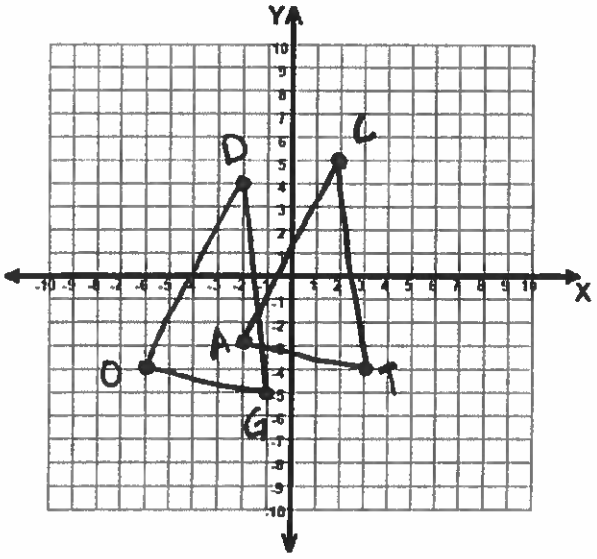


a.) A'(6, -1) B' (6 , -4) C' (2 , -1) D' (2 , -4 ;

b.) A' (-2 , 1) B' (-2 , 4) C' (-6 , 1) D' (-6 , 4)

c.) A' (2 , -1) B' (2 , - 4) C' (6 , - 1) D' (6 , -4)

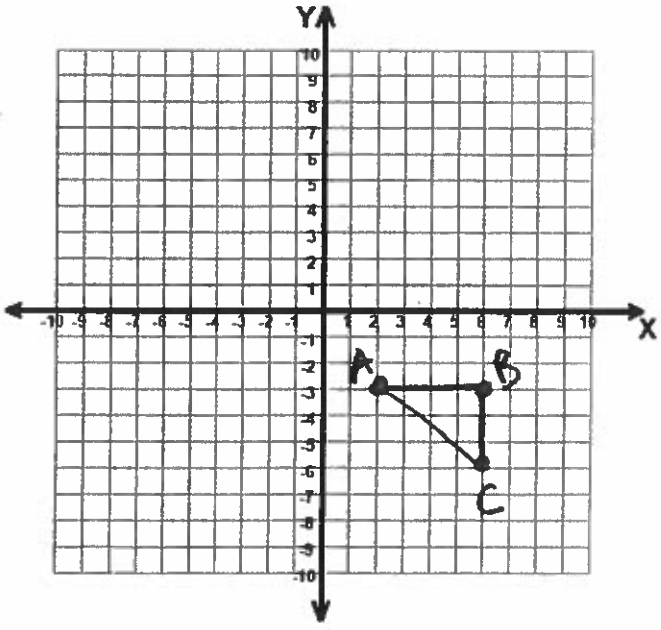
7.) Which rule was used to create △DOG from △CAT?



a.)(x, y) → (x + 1 , y -4) c.) (x, y)→ (4x , 4y)

b.) (x, y)→ (x -4 , y -1) d.) (x, y)→ (1/4x , 1/4y)

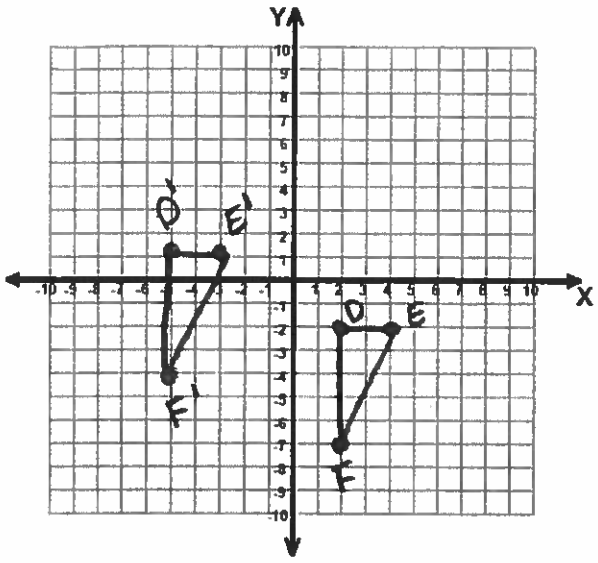
8.) What would the coordinates of A' be if you rotated △ABC 90° clockwise? A (2 , -3)



a.) (3 , 2) c.) (-2 , 3)

b.) (-3, -2) d.) (2 , -3)

9.) Which rule was used to create △ D'E'F'?



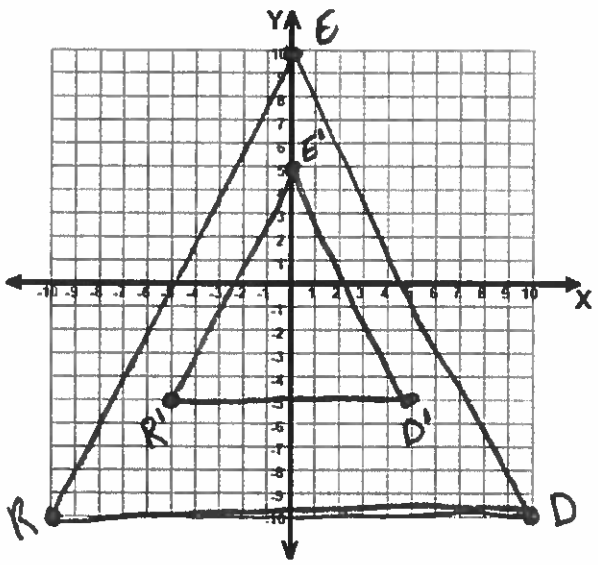
a.)(x, y) → (7x , 7y)

c.) (x, y)→ (x + 7 , y -3)

b.) (x, y)→ (3x , 3y)

d.) (x, y) →(x - 7 , y +3)

10.) Which rule was used to create triangle R'E'D'?



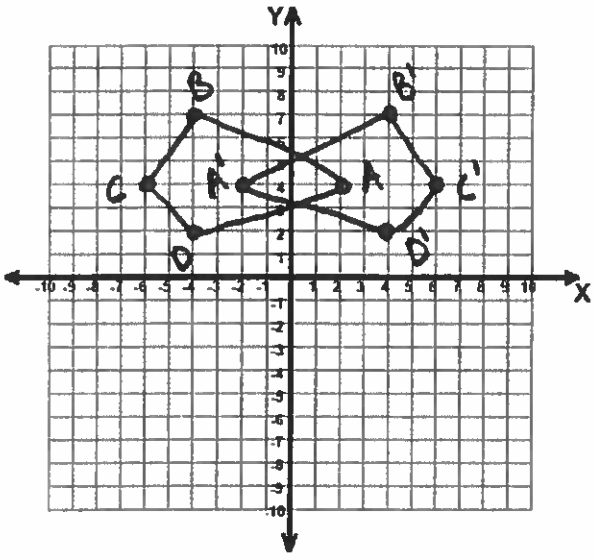
a.)(x, y) → (-x , y)

c.) (x, y)→ (0.5x, 0.5y)

b.) (x, y)→ (2x , 2y)

d.) (x, y) →(x - 2 , y +2)

11.) Which rule describes the transformation that was applied to the figure that is graphed below?



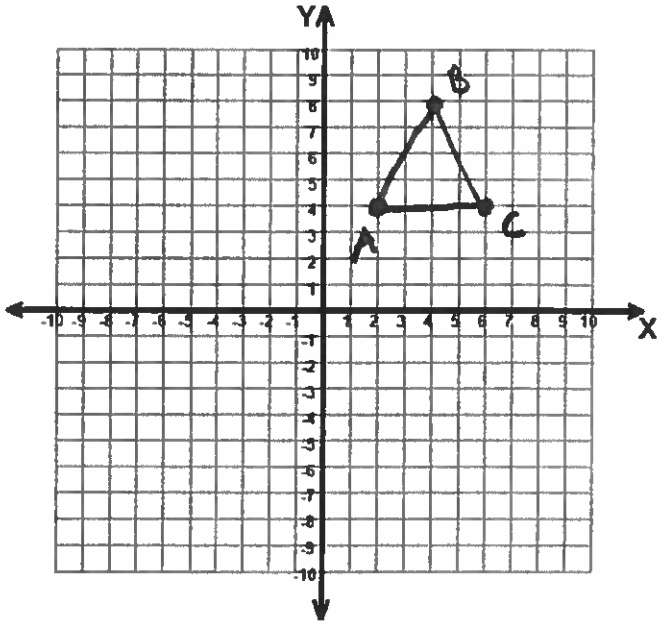
a.)(x, y) → (4x ,4y)

c.) (x, y) →(y, -x)

b.) (x, y)→ (-x , y)

d.) (x, y) →(x , - y)

12.)What would the coordinates of A' be if you rotated △ABC 90° counter-clockwise?



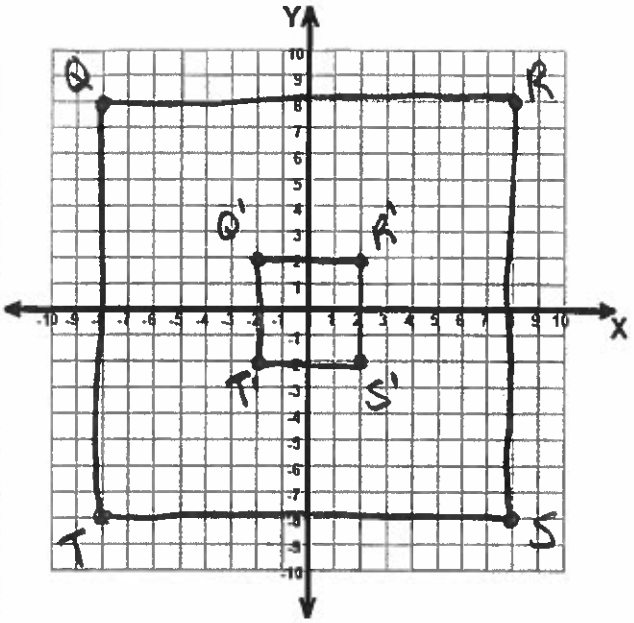
a.) (2 , 4)

c.) (2 , -4)

b.) (-4 , 2)

d.) (- 4 , -2)

13.) Quadrilateral Q'R'S'T' is dilation of quadrilateral QRST, with the origin as the center of dilation.

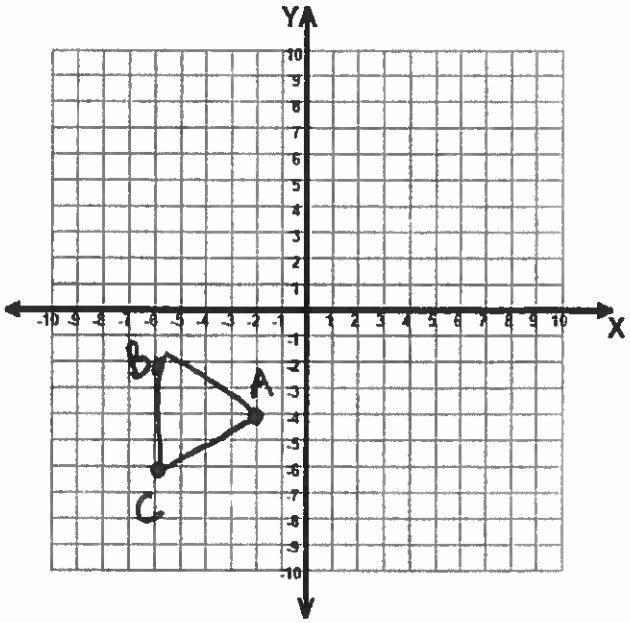


Which rule was applied to the above image?

a.)(x, y) → (4x , 4y) c.) (x, y)→ (0.5x , 0.5y)

b.) (x, y)→ (-x , y) d.) (x, y)→ (0.25x,0.25y)

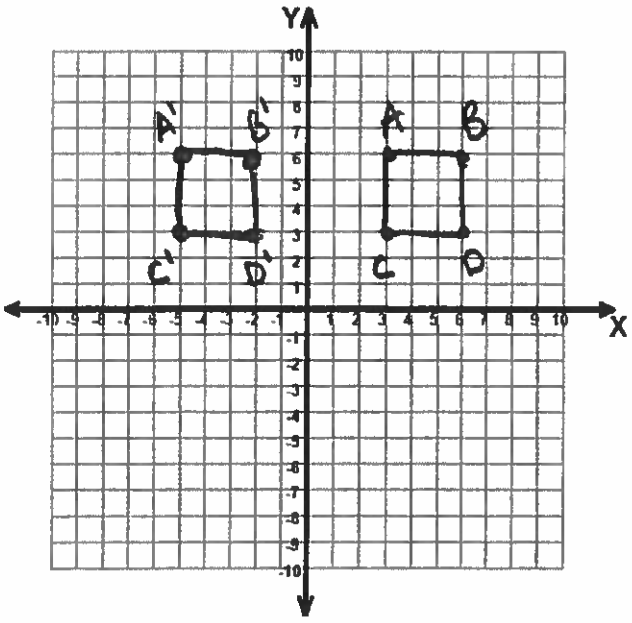
14.) What would the new ordered pair be for A' if triangle ABC was reflected over the y – axis?



a.) A' (-2 , -4) c.) A' (-4 , -2)

b.)A' (2 , -4) d.) A' (-2 , 4)

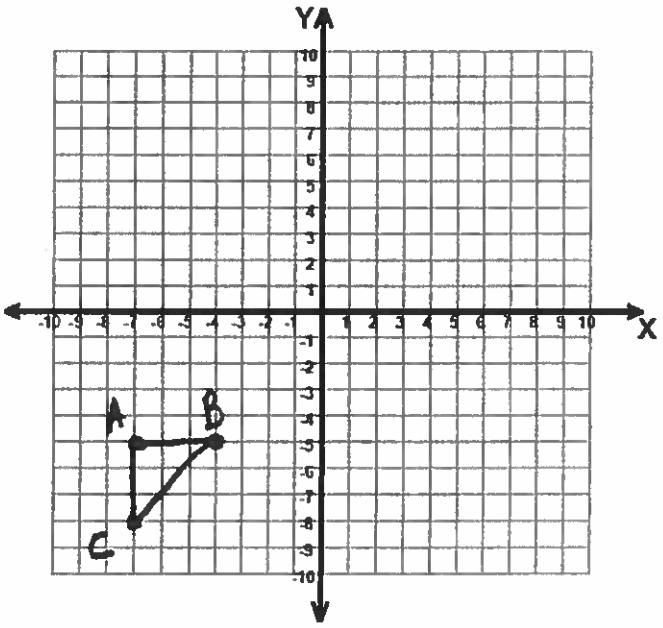
15.) What rule was applied to A'B'C'D' ?



a.)(x, y) → (-x , y) c.) (x, y)→ (x – 8 , y)

b.) (x, y)→ (x , -y) d.) (x, y)→ (x + 8 , y -1)

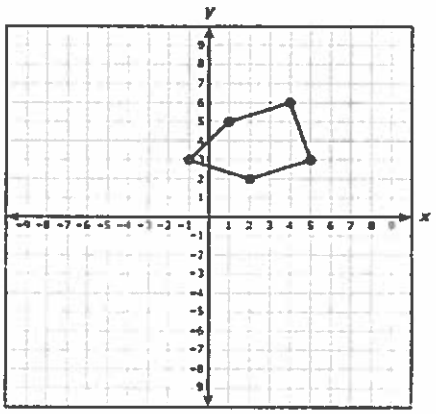
16.)What would the coordinates of B' be if you rotated △ABC 270° counter-clockwise? B (-4 , -5)



a.) (5 , -4) c.) (-4 , -5)

b.) (-5 , 4) d.) (4 , -5)

17.) The coordinate grid shows a pentagon. The pentagon is translated 1 unit to the left and 10 units down to create a new pentagon.



Which rule describes the transformation?

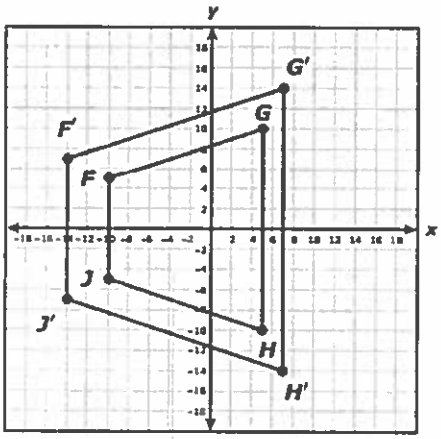
F $(x, y) \rightarrow (x - 1, y - 10)$

G $(x, y) \rightarrow (x + 1, y - 10)$

H $(x, y) \rightarrow (x - 1, y + 10)$

J $(x, y) \rightarrow (x + 1, y + 10)$

18.) Quadrilateral FGHJ was dilated with the origin as the center of the dilation to creat F'G'H'J'.



Which rule describes the transformation?

F $(x, y) \rightarrow (\frac{5}{7}x, \frac{5}{7}y)$

G $(x, y) \rightarrow (x + 1, y + 2)$

H $(x, y) \rightarrow (1.4x, 1.4y)$

J $(x, y) \rightarrow (x - 2, y + 1)$

19.) Tim graphed A (2 , -3) B (1 , 3) C (4 , 5) then graphed A' (3 , 0) B' (2 , 6) C' (5 , 8).
What rule did he apply to his image?

a.) (2x , 2y)
b.) (x – 1 , y – 3)
c.) (0.5x , 0.5 y)
d.) (x + 1 , y + 3)

20.) Jenny graphed D (2 , 5) E (3 , 4) F (5 , 3) then graphed D' (3, 7.5) E' (4.5 , 6) F' (7.5 , 4.5).
What rule did she apply to her image?

a.) (x + 1 , y + 2.5)
b.) (3x , 3y)
c.) (1.5x , 1.5y)
d.) (x + 1 , y – 2.5)

21.) A transformation is applied to a figure to create a new figure. Which transformation does NOT preserve congruence?

a.) Translation 2 units to the right
b.) Rotation of 90 °
c.) Dilation using a scale factor of 5
d.) Reflection over the x – axis