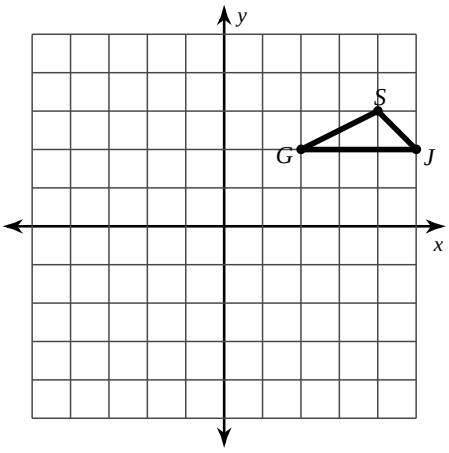
Geometry Name_____

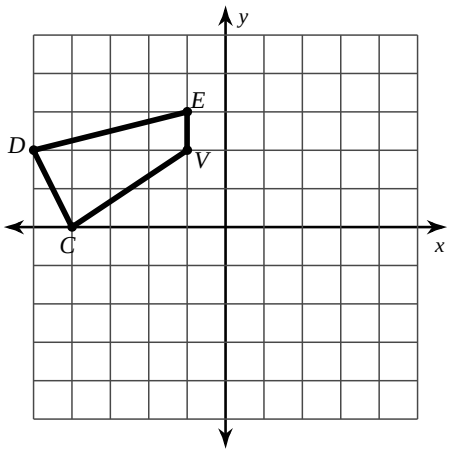
Corrective Assignment Unit 8

Graph the image of the figure using the transformation given.

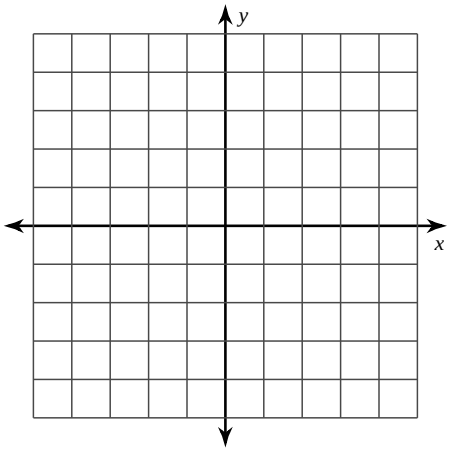
1) translation: 7 units left



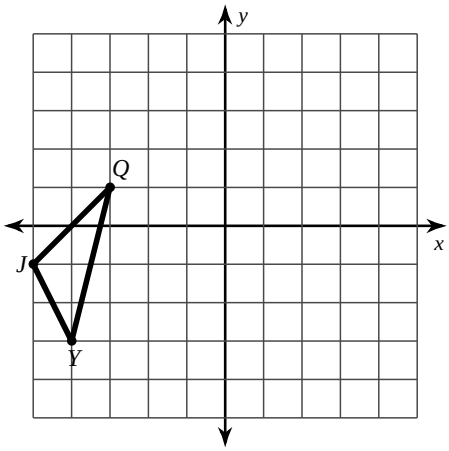
2) translation: 3 units right and 1 unit down



3) translation: $(x, y) \rightarrow (x + 7, y - 3)$
$R(-4, 2)$, $T(-3, 4)$, $M(-3, 2)$

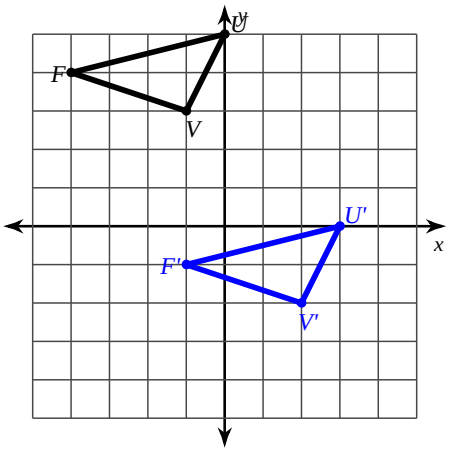


4) translation: $(x, y) \rightarrow (x + 6, y + 3)$

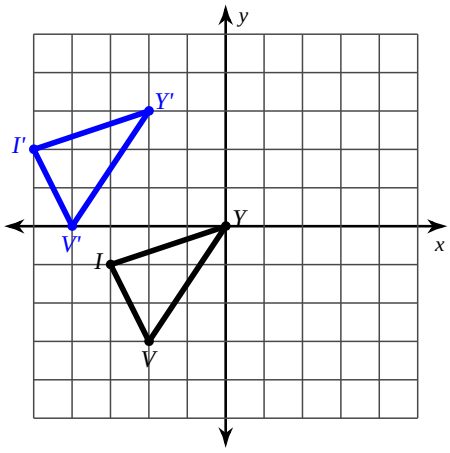


Write an ALGEBRAIC RULE to describe each transformation.

5)

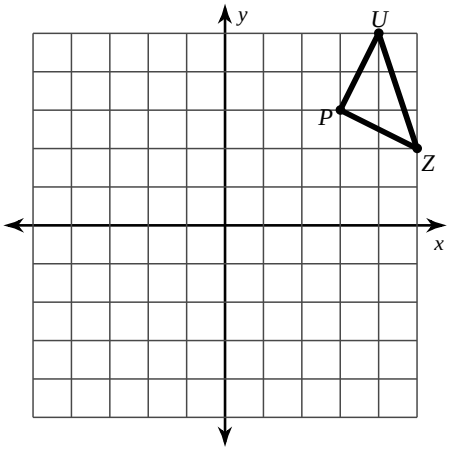


6)

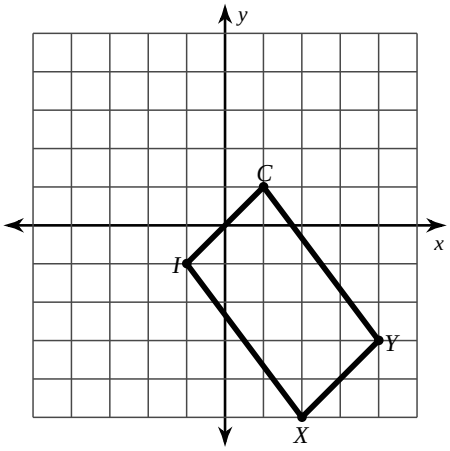


Graph the image of the figure using the transformation given.

7) reflection across the y-axis

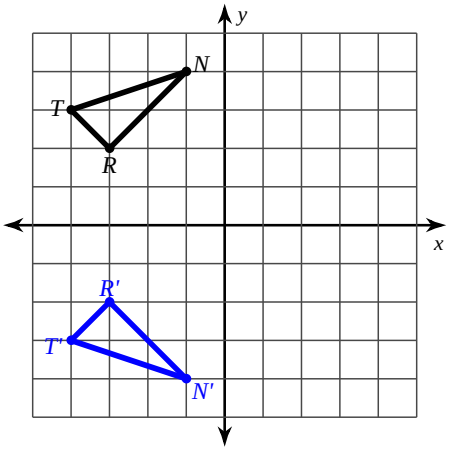


8) reflection across the x-axis

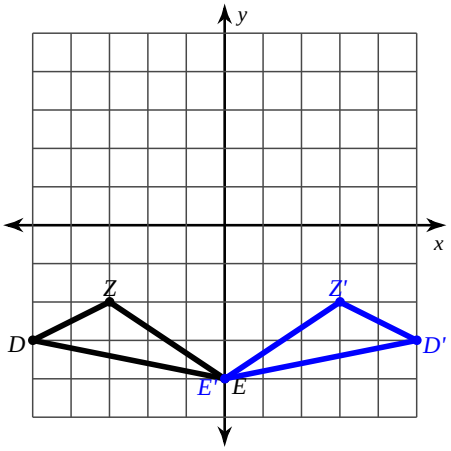


Give the line of reflection (equation or axis) for the transformations below:

9)

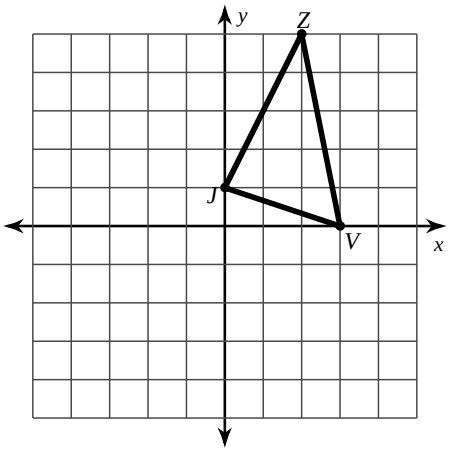


10)

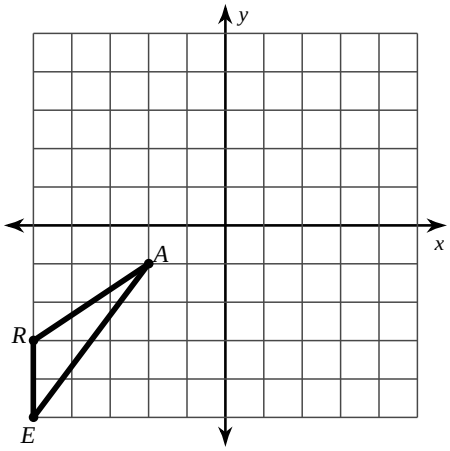


Graph the image of the figure using the transformation given.

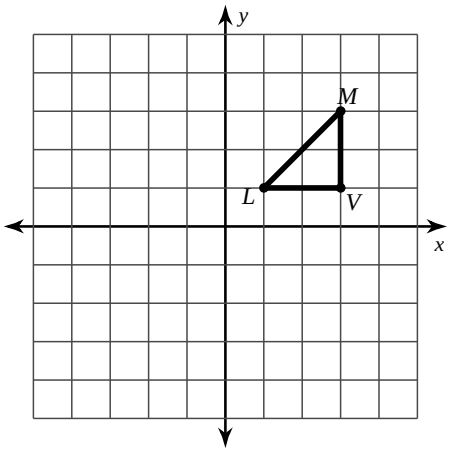
11) rotation 90° counterclockwise about the origin



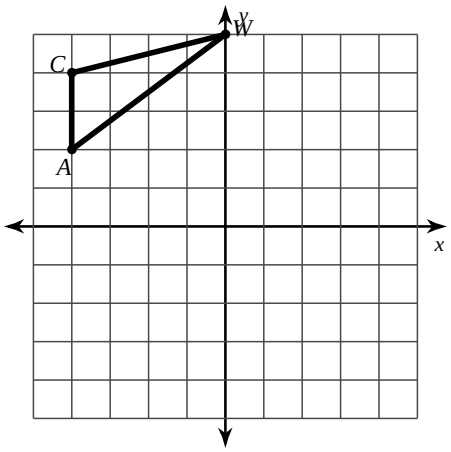
12) rotation 180° about the origin



13) rotation 180° about the origin



14) rotation 90° clockwise about the origin



Find the coordinates of the vertices of each figure after the given transformation.

15) rotation 180° about the origin
$U(-2, 1)$, $Z(-3, 5)$, $B(1, 5)$

16) rotation 90° clockwise about the origin
$G(1, -3)$, $C(0, -1)$, $L(3, 0)$

17) rotation 90° clockwise about the origin
$R(2, 1)$, $V(1, 4)$, $S(5, 5)$

18) rotation 90° counterclockwise about the origin
$V(-5, -1)$, $M(-4, 3)$, $R(-1, 1)$

19. Give three numbers that ***DO NOT*** have reflectional symmetry.

20. Give an example of rotational symmetry in sports.

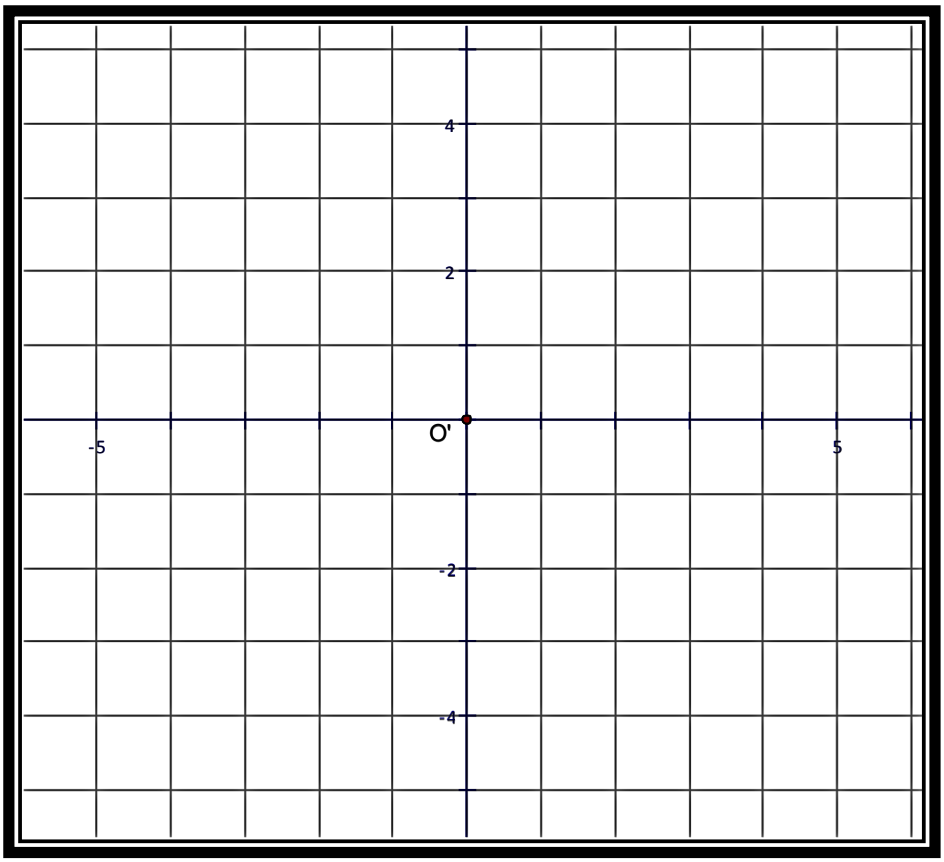
Application and Extension

21. a. Graph K'I'T', the image of K(1, -4), I(2, 0), T(1, -1) after a translation using the rule (x,y) → (x + 3, y + 5).

b. Graph K"I"T", the image of K'I'T', after a CLOCKWISE rotation of 180^0.

c. Graph K'"I'"T'", the image of K"I"T", after a reflection in the x-axis.

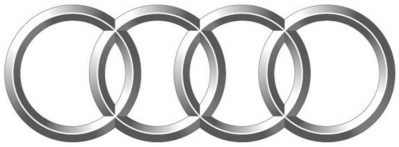
d. Is the transformation of ΔKIT → ΔK'I'T' → ΔK"I"T" → ΔK'"I'"T'" an isometry?



Kell if the following logos have Rotational Symmetry, Reflectional Symmetry, neither, or both.

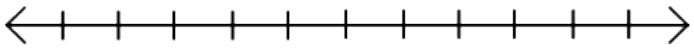
22. 

23. 

24. 

Solve each equation for x!

1. $-3x - 15 > 15$



2. $-2x + 9 + 5x = -3x - 15$

Factor!

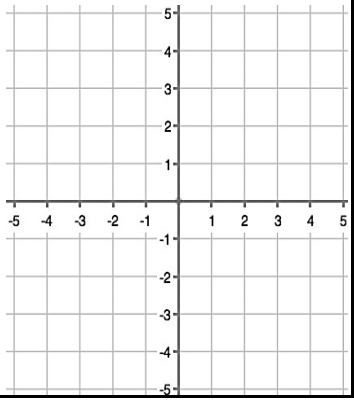
3. $x^2 - 4x - 5$

Factor!

4. $2x^2 + 5x + 3$

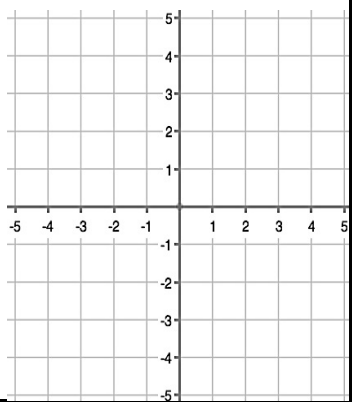
5. Graph the equation:

$6y + 4x = 12$



6. Graph the equation:

$3y = 12 + 4x$



Ilgebra Review