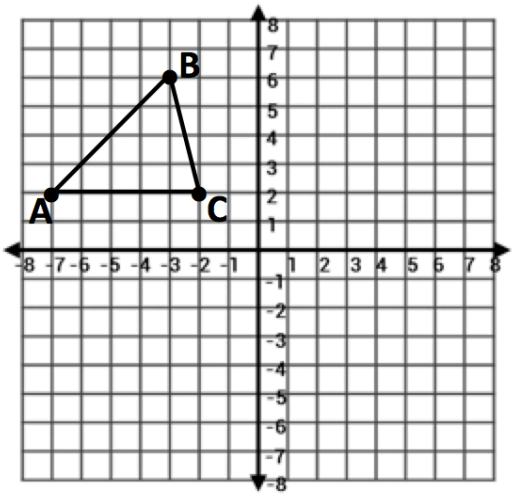
1. TRANSLATE THE FIGURE 3 UNITS RIGHT AND 7 UNITS DOWN. **RECORD** THE COORDINATES OF THE IMAGE. WRITE THE **ALGEBRAIC EXPRESSION** OF THE TRANSLATION.

A'

B'

C'



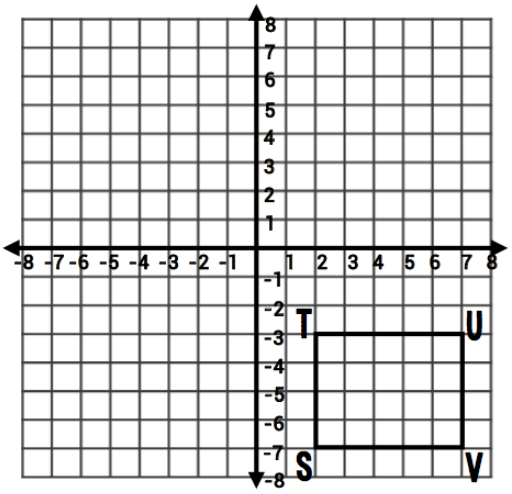
2. TRANSLATE (X, Y) → (X - 8, Y + 2). RECORD THE COORDINATES OF THE IMAGE.

S'

T'

U'

V'



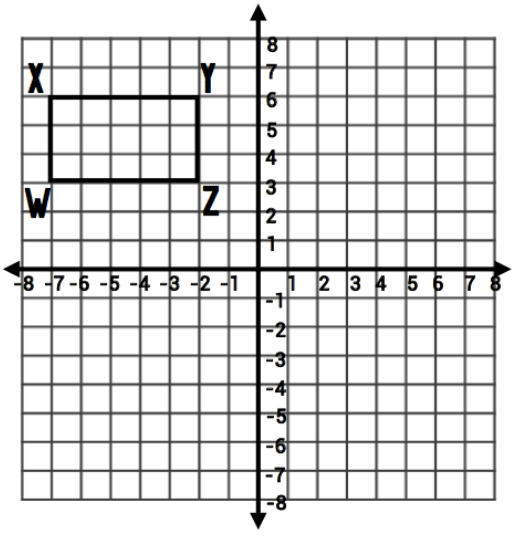
3. REFLECT THE FIGURE OVER THE X-AXIS. **RECORD** THE COORDINATES OF THE IMAGE.

W'

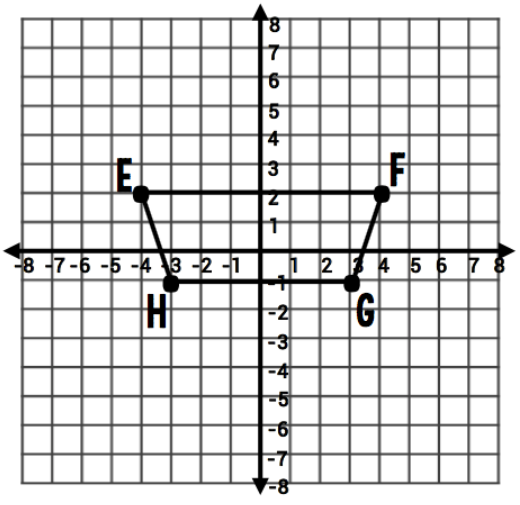
X'

Y'

Z'



4. REFLECT THE FIGURE OVER THE X = - 2. **RECORD** THE COORDINATES OF THE IMAGE.



5. THE COORDINATES BELOW REPRESENT A TRIANGLE THAT WAS DILATED.

J(-3, -12) → J'(-2, -8)

K(-6, -15) → K'(-4, -10)

L(-9, -12) → L'(-6, -8)

WHAT IS THE SCALE FACTOR USED IN THE DILATION?

6. FOR QUESTION #2, MARK THE STATEMENTS AS TRUE OR FALSE.

_____ THE PRE-IMAGE IS LOCATED IN QUADRANT III.

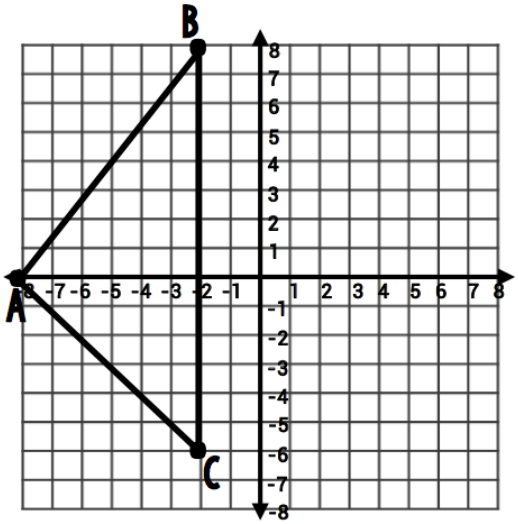
_____ THE PRE-IMAGE AND IMAGE ARE CONGRUENT FIGURES.

7. DILATE THE FIGURE BY A SCALE FACTOR OF ½. **RECORD** THE COORDINATES OF THE IMAGE.

A'

B'

C'



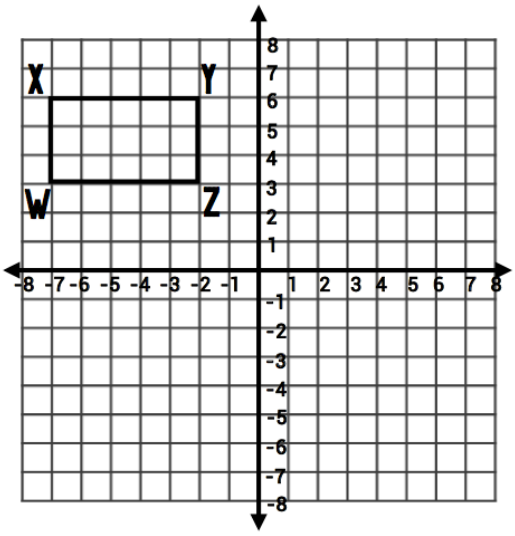
8. ROTATE THE FIGURE 90° CLOCKWISE ABOUT THE ORIGIN. **RECORD** THE COORDINATES OF THE IMAGE.

W'

X'

Y'

Z'

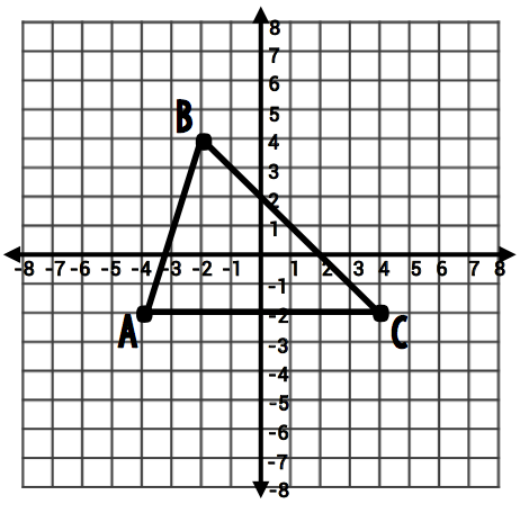


9. ROTATE THE FIGURE 180° COUNTERCLOCKWISE ABOUT THE ORIGIN. **RECORD** THE COORDINATES OF THE IMAGE.

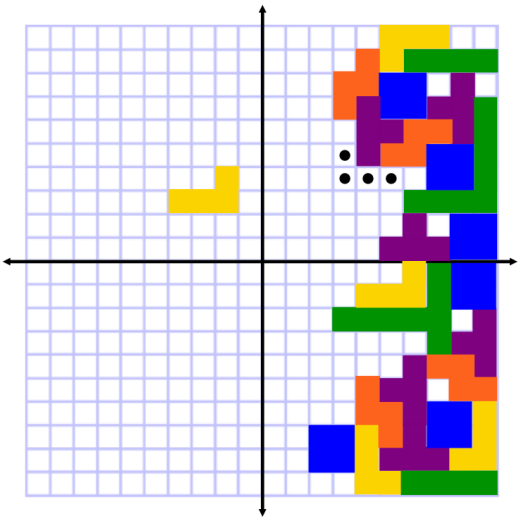
A'

B'

C'



10. LIST THE TRANSFORMATIONS NECESSARY TO MOVE THE L-BLOCK INTO THE INDICATED SPOT.



11. POINT H IS LOCATED AT (-7, 5). WHERE IS H' AFTER A 270° CLOCKWISE ROTATION ABOUT THE ORIGIN?

12. WHAT IS THE CORRECT ALGEBRAIC REPRESENTATION FOR A TRANSLATION OF 5 UNITS LEFT AND 9 UNITS UP?