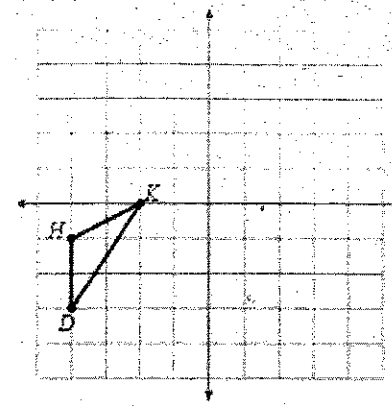
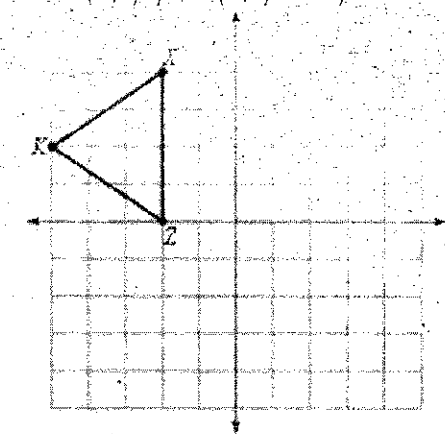


23. $\langle 2, 3 \rangle$



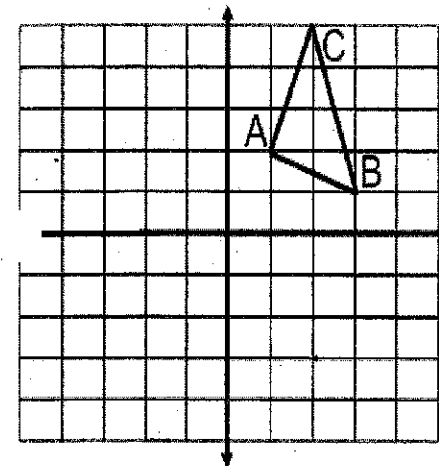
Review 24. $(x, y) \rightarrow (x, y - 4)$



Composition of Transformations

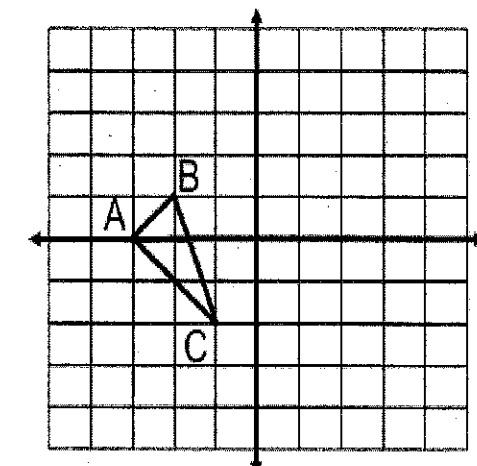
(Label the first transformation with $\Delta A'B'C'$. After the second transformation, label it with $\Delta A''B''C''$.)

25. a. R_{180}
 b. reflection over $y = -1$



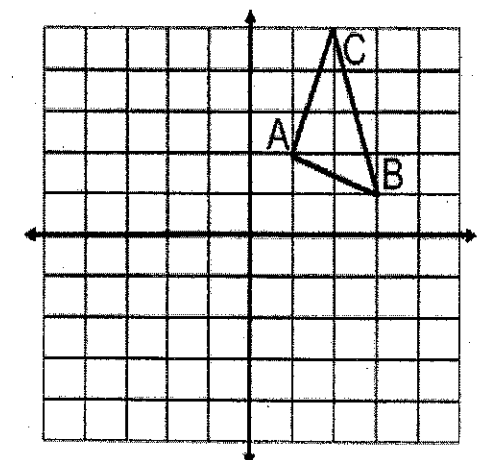
A' _____ A'' _____
 B' _____ B'' _____
 C' _____ C'' _____

26. a. reflection across $y = x$.
 b. R_{90}



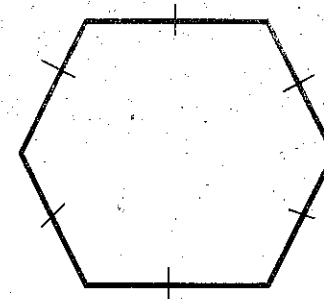
A' _____ A'' _____
 B' _____ B'' _____
 C' _____ C'' _____

27. A. Using the figure at the right, rotate point A 120° counterclockwise about the origin.

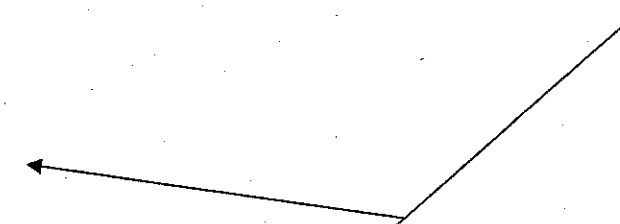


- B. Determine B' after a dilation from point $(-2, -3)$ with a scale factor of 2.

28. Does the figure below have rotational symmetry? If so to what order? Degree?

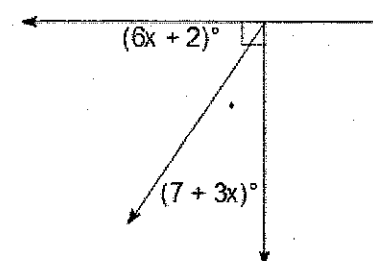


29. Determine the measure of $\angle ABC$

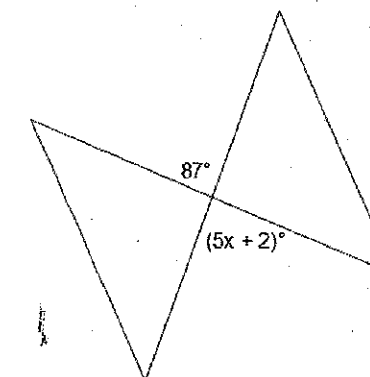


Solve for x.

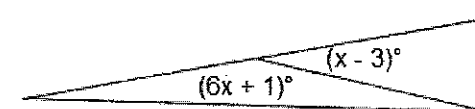
30.



31.

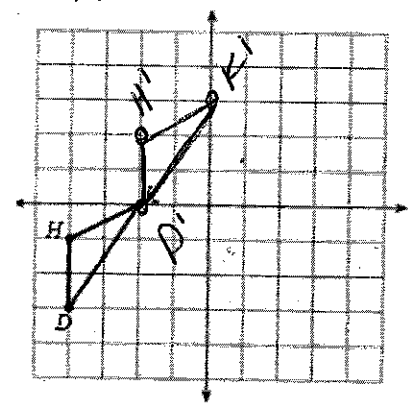


32.

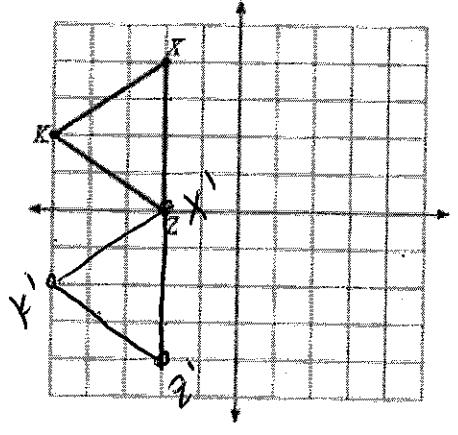


part 2
review

23. $\langle -2, 3 \rangle$



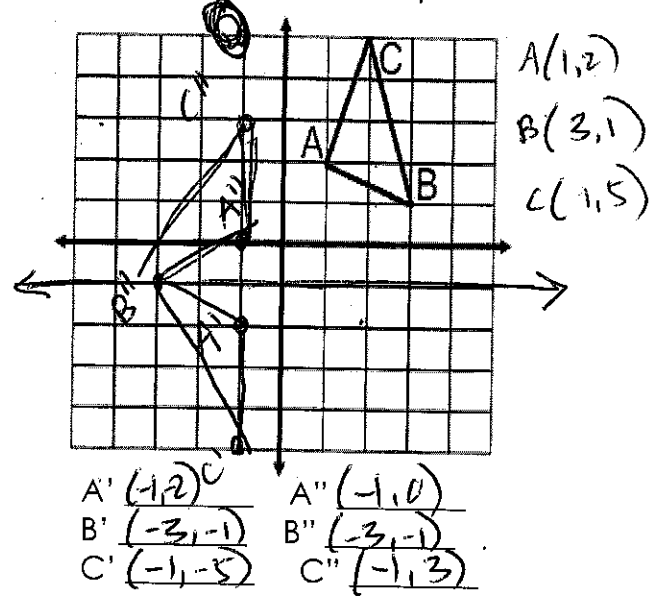
24. $(x, y) \rightarrow (x, y - 4)$



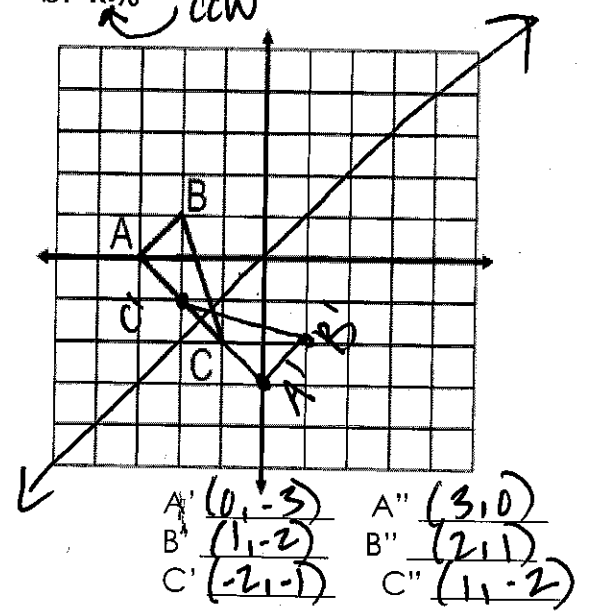
Composition of Transformations

(Label the first transformation with $\Delta A'B'C'$. After the second transformation, label it with $\Delta A''B''C''$.)

25. a. R_{180}
b. reflection over $y = -1$



26. a. reflection across $y = x$.
b. R_{90} CCW



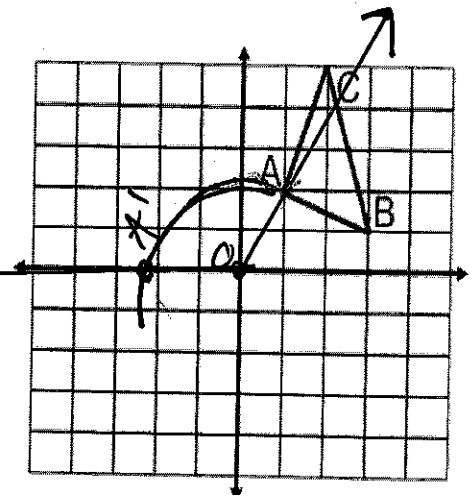
27. A. Using the figure at the right, rotate point A 120° counterclockwise about the origin.

- Draw Ray from origin to A
- create circle with radius OA

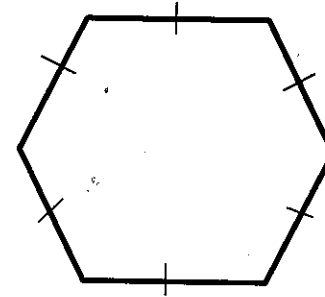
B. Determine B' after a dilation from point $(-2, -3)$ with a scale factor of 2.

$$(x, y) \rightarrow (2x + 2, 2y + 3)$$

$$B(3,1) \rightarrow B' \rightarrow (2 \cdot 3 + 2, 2 \cdot 1 + 3) = (8, 5)$$

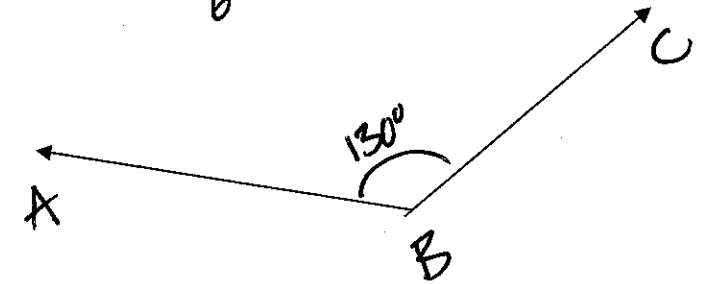


28. Does the figure below have rotational symmetry? If so to what order? Degree?



- Yes, 6th order
- Regular hexagon - 6 sides,
order 6
- $60^\circ = \frac{360}{6}$

29. Determine the measure of $\angle ABC$



Solve for x.

30. $\text{Complimentary} = 90^\circ$

$$9x + 9 = 90$$

$$\boxed{x = 9}$$

31.

Vertical (equal)

$$87 = 5x + 2$$

$$85 = 5x$$

$$\boxed{x = 17}$$

32.

$$6x + x + 1 - 3 = 180$$

$$7x - 2 = 180$$

$$\boxed{x = 26}$$

Linear pair = 180°
(supplementary)