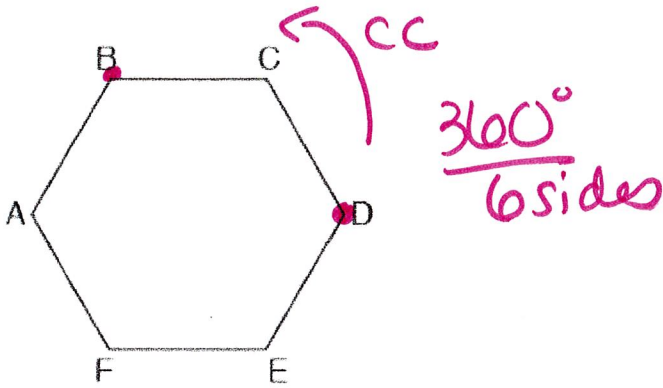


# hint sheet

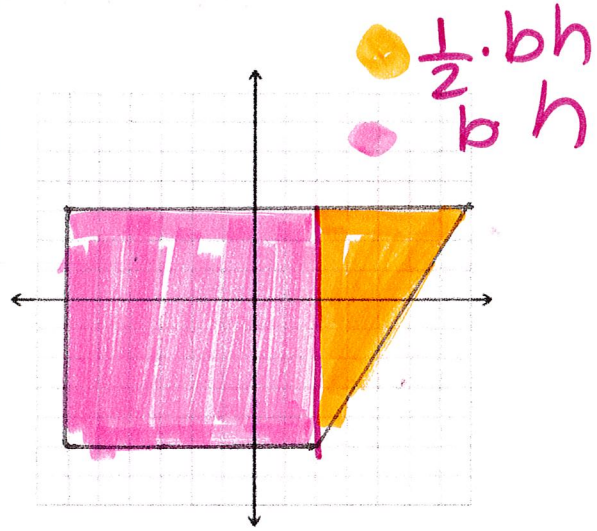
Name \_\_\_\_\_

TH #9

1. Name the angle of rotation that would map point D onto point B (counterclockwise!) \_\_\_\_\_



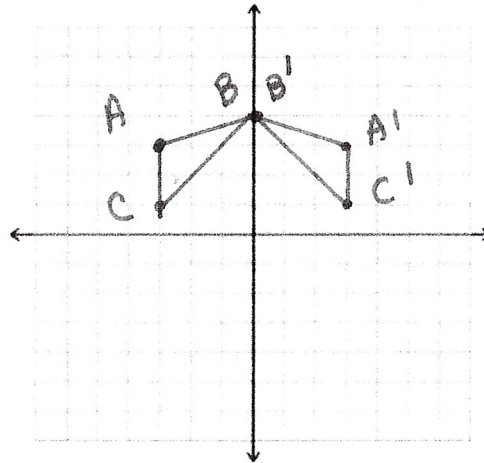
2. Find the area of the figure



3. \_\_\_\_\_ Which of the following statements is true?

- A. SSS;  $\overline{AB}$  is taken to  $\overline{A'B'}$ ,  $\overline{AC}$  is taken to  $\overline{B'C'}$ ,  $\overline{BC}$  is taken to  $\overline{A'C'}$
- B. AAA;  $\angle A$  is taken to  $\angle A'$ ,  $\angle B$  is taken to  $\angle B'$ ,  $\angle C$  is taken to  $\angle C'$ ,
- C. AAS;  $\angle A$  is taken to  $\angle A'$ ,  $\angle B$  is taken to  $\angle B'$ ,  $\overline{BC}$  is taken to  $\overline{B'C'}$
- D. ASA;  $\angle A$  is taken to  $\angle A'$ ,  $\angle B$  is taken to  $\angle B'$ ,  $\overline{BC}$  is taken to  $\overline{B'C'}$

diagram for #3



4. write the equation of a line parallel to the line  $y = \frac{1}{4}x - 1$  passing through  $(24, 36)$

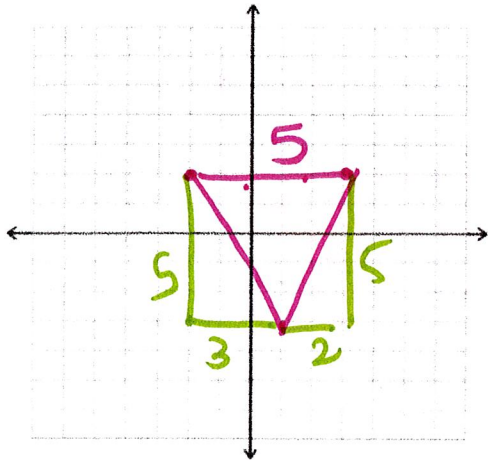
hint:  $y = mx + b$   
 $x y$

5. write the equation of a line perpendicular to the line  $y = \frac{1}{4}x - 1$  passing through  $(24, 36)$

$x y$   
 $y = mx + b$   
 $1 m = -4$

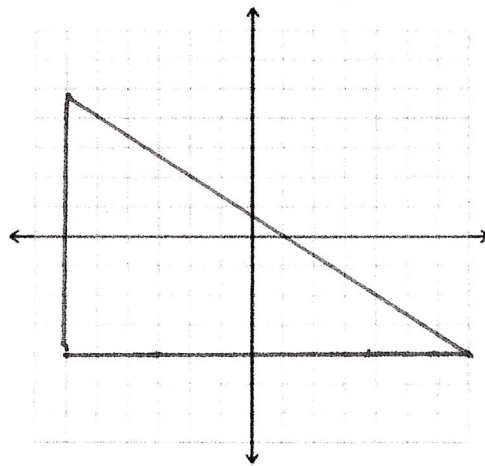
6. Find the perimeter of the triangle with the vertices:  $(-2, 2)$   $(3, 2)$   $(1, -3)$

*add all sides*



7. Find the circumcenter of the triangle

*draw  $\perp$  bisectors*



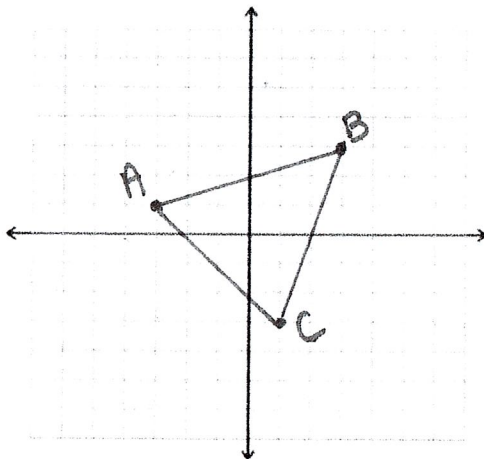
8. dilate  $\triangle ABC$  by a scale factor of 2 with center  $(0,0)$

*multiply coordinates by 2!*

length of  $AB =$  \_\_\_\_\_

length of  $A'B' =$  \_\_\_\_\_

$\angle A \cong \angle$  \_\_\_\_\_

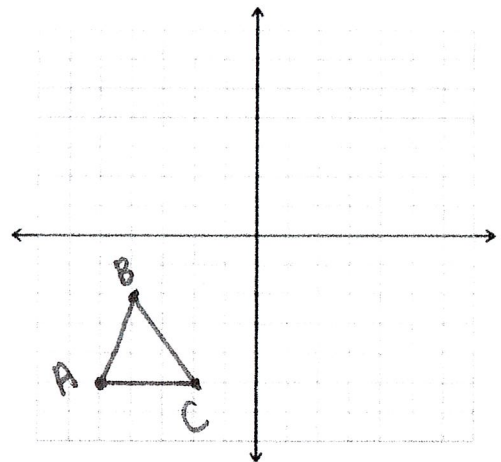


9. dilate  $\triangle ABC$  by a scale factor of 3 with center A.

*count the slope 3 times from A*

$AB =$  \_\_\_\_\_  
length of  $A'B' =$  \_\_\_\_\_

$BC$  is parallel to \_\_\_\_\_



10. list the three undefined terms in geometry:

11. list the three isometries that preserve side length and angle measure: