

Name \_\_\_\_\_

Transformation TH HW 2

1. The following are steps to the **perpendicular bisector construction**, out of order. Place the correct numbers next to each step.

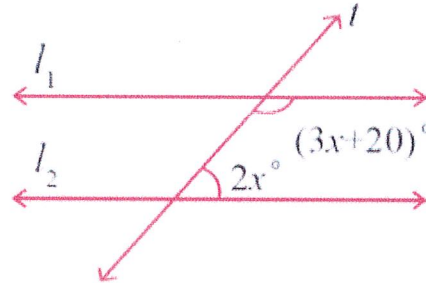
\_\_\_\_\_ Draw an arc above and below the segment (or a semicircle)

\_\_\_\_\_ use a straightedge to connect the intersections of the arcs.

\_\_\_\_\_ Start with  $\overline{PQ}$ , place your compass on P and open it to more than halfway across the segment.

\_\_\_\_\_ without changing the compass setting, place your compass on Q and make arcs above and below the segment (or semicircles)

2. solve for x:



3. Write the equation of a line that is Parallel to  $y = 4x - 12$  and passes through  $(-10, 25)$  *hint:*

$$y = mx + b$$

4. Write the equation of a line that is Perpendicular to  $y = 4x - 12$  and passes through  $(-10, 25)$

5. Name the three undefined terms in geometry

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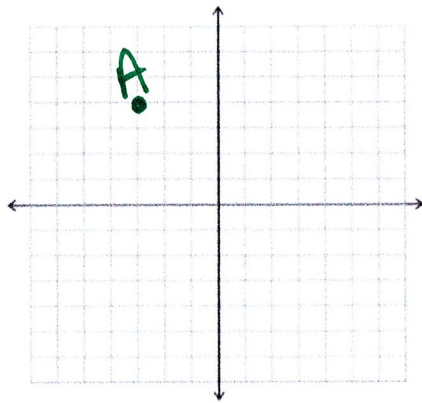
6. Name the three rigid transformations:

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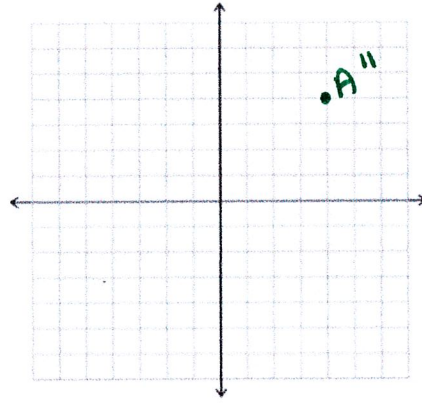
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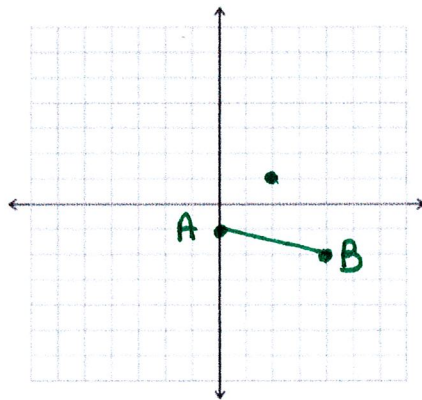
7. Reflect over the y axis, then  $\langle 2, -4 \rangle$   
 $A''$  \_\_\_\_\_



8 Point A was reflected over the x axis, then slid right 3 and up 2.  $A'''$  is  $(4, 4)$ . Find A \_\_\_\_\_

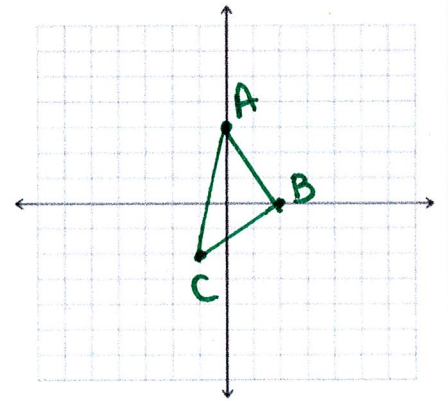


9 rotate  $90^\circ$  counterclockwise about  $(2, 1)$   
 $A'$  \_\_\_\_\_  $B'$  \_\_\_\_\_



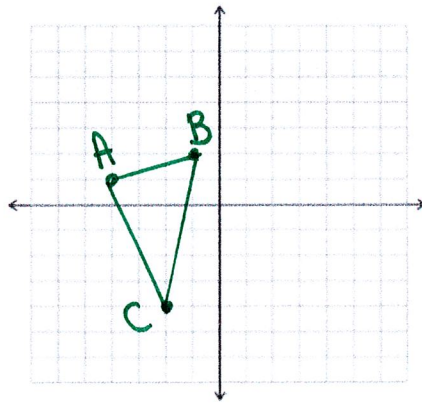
10 reflect over  $x = -2$   
 Name the coordinates:

$A'$  \_\_\_\_\_  
 $B'$  \_\_\_\_\_  
 $C'$  \_\_\_\_\_

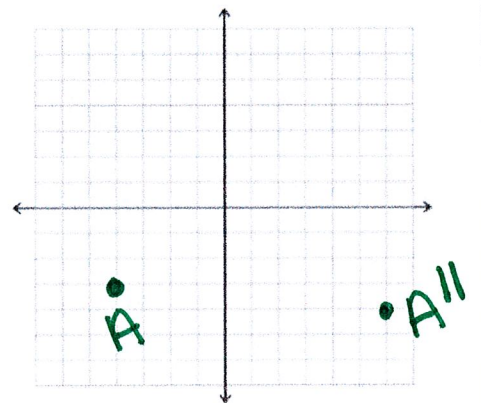


11  $\langle 5, -1 \rangle$   
 Name the coordinates:

$A'$  \_\_\_\_\_  
 $B'$  \_\_\_\_\_  
 $C'$  \_\_\_\_\_



12 write a set of rules to describe the transformation:



1.  
 2.