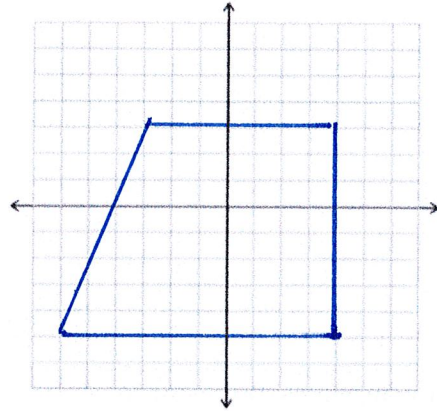


Name _____

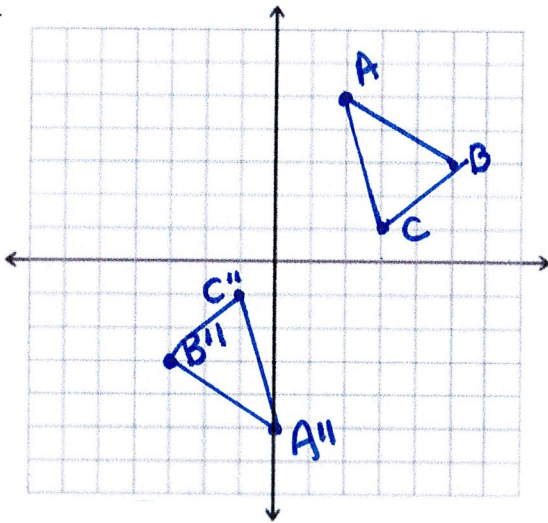
TH #7

1. Write the equation of a line that is PARALLEL to the line $y = -\frac{2}{3}x + 3$ and passes through $(-12, 10)$

2. find the perimeter of the figure _____



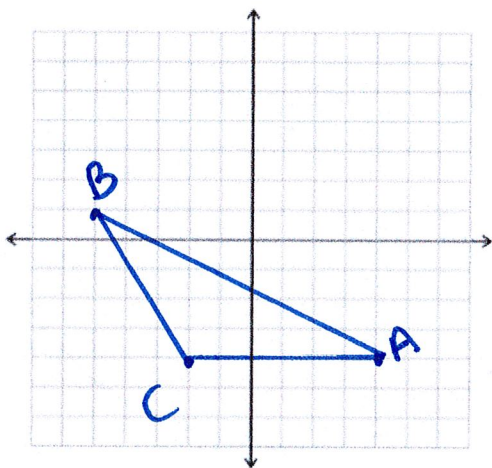
3.



_____ Which series of rigid motions proves that $\triangle ABC \cong \triangle A'B'C'$?

- A. reflect over the y-axis, then reflect over the x-axis
- B. reflect over the line $x = 1$, then reflect over the x-axis
- C. Reflect over the line $y = 1$, then reflect over the x-axis
- D. rotate 270° counterclockwise about the origin, then reflect over the x-axis

4. Find the midpoint of \overline{AB}

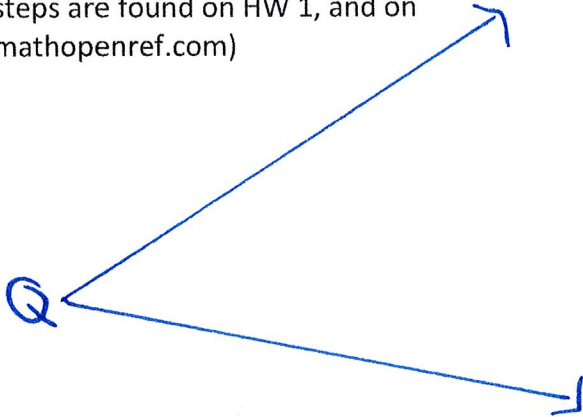


5. Consider the three rigid motions. Write True or false:

- A. _____ Angle measures is preserved
- B. _____ orientation is preserved
- C. _____ Side length is preserved

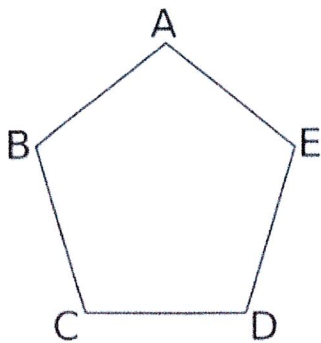
(preserved means stays the same)

6. Construct the angle bisector to $\angle PQR$ (hint: the steps are found on HW 1, and on mathopenref.com)



7. list the steps to the angle bisector construction:

8. How many degrees would you rotate counterclockwise to map \overline{AB} onto \overline{DE} ?



9. Consider a regular octagon.

State the number of lines of symmetry: _____

State the angle of rotation: _____

10. The following are the steps to constructing a hexagon, but they are scrambled. Write the numbers of the steps:

_____ Connect adjacent points with a straightedge.

_____ Starting with circle O, mark A anywhere on the circle. Place your compass on O and measure to A: you are finding the length of the **radius \overline{OA}**

_____ Do not change your compass: place compass on B and repeat this process around the circle until you end at A.

_____ With your compass set to the length of the radius, place your compass on A and make an arc intersecting the circle. Call this intersection B

11. Construct a hexagon inscribed in a circle

