

Name _____

Transformation TH HW 1

1. The following are steps to the **Angle Bisector** construction, but they are out of order. Place the correct numbers next to each step.

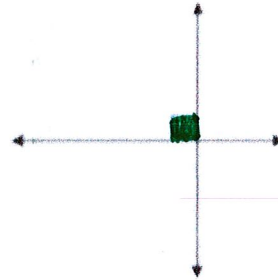
_____ without changing the compass setting, place the compass on B and make another arc inside the angle.

_____ connect the intersections of the arcs to vertex Q.

_____ Start with $\angle PQR$, and with the compass on Q draw any arc intersecting both sides. Label the intersections A and B.

_____ Place your compass on A make an arc inside the angle.

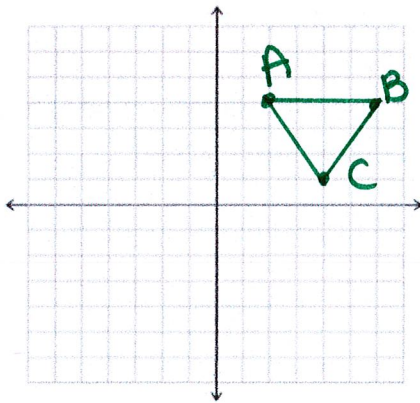
2. This picture shows _____ lines.



3. $(-2, 4)$

Name the coordinates:

A' _____
 B' _____
 C' _____

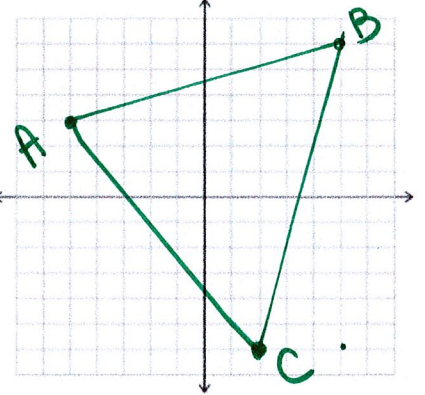


4. Find the midpoint of each side of the triangle:

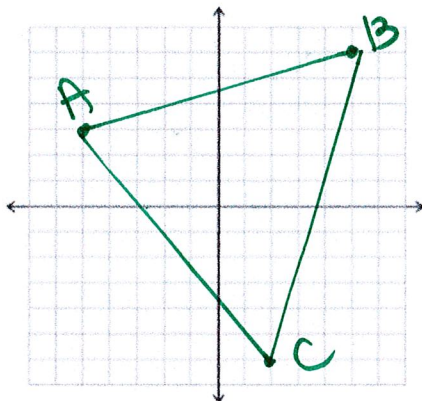
A(-5, 3) B(5, 6) C(2, -6)

\overline{AB} _____
 \overline{BC} _____
 \overline{AC} _____

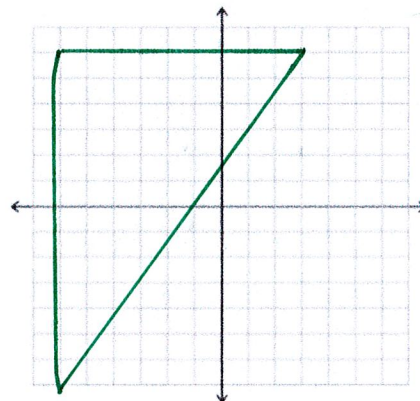
$(\frac{x+x}{2}, \frac{y+y}{2})$



5. Find the perimeter of the triangle

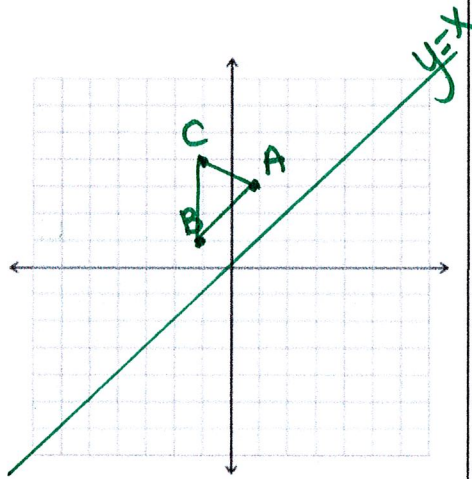


6. Find the area of the triangle $A = \frac{1}{2}bh$



7. reflect over $y = x$
Name the coordinates:

A' _____
B' _____
C' _____



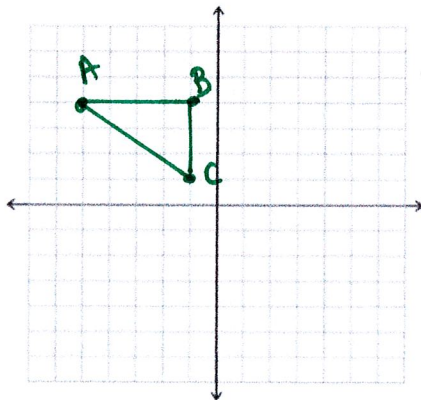
8 What is the slope of the line that is
PERPENDICULAR to $y = -\frac{3}{7}x - 10$?

9. Grace compares two lines with the following
equations:
 $y = 2x - 3$ $y = 2x + 3$
Are these lines parallel, perpendicular, or neither?
How do you know?

10 George compares two lines with the following
equations:
 $y = \frac{1}{2}x - 3$ $y = 2x + 3$
Are these lines parallel, perpendicular, or neither?
How do you know?

11 rotate 180°
Name the coordinates:

A' _____
B' _____
C' _____



12 reflect
over the x-axis. Name
the
coordinates:

A' _____
B' _____
C' _____

