Name Date

1. Follow the directions below to draw a figure in the box below. **Use a straightedge (ruler)** .

   a. Draw 2 points, X and Y

   b. Draw $\overleftrightarrow{XY}$.

   c. Draw point *Z* that is not on $\overleftrightarrow{XY}$.

   d. Draw YZ.

   e. Draw $\overline{XZ}$.

(You may need to draw and label another point to answer the next two questions.)

   f. Name an obtuse angle.

   _____

   g. Name an acute angle.

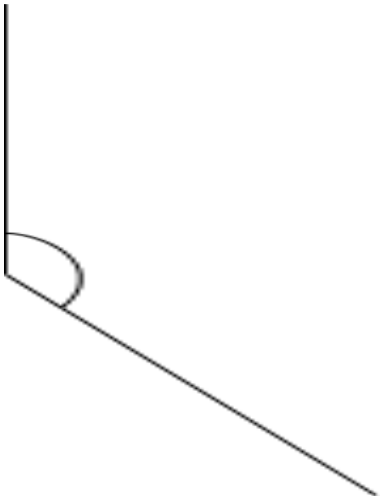
_____

2. Use your **protractor** to measure the angle indicated by the arc. Classify each angle as **right, acute, or obtuse**. **Explain** how you know each angle's classification.

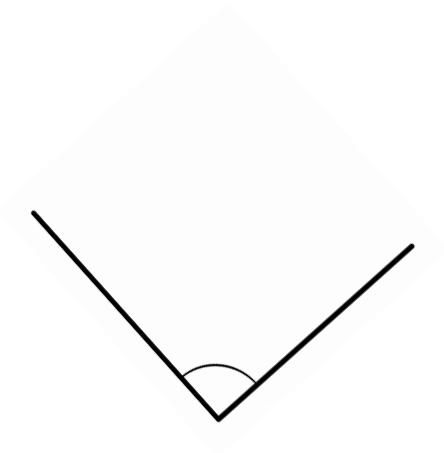
   a.

Reminder: Use your **protractor** to measure the angle indicated by the arc. Classify each angle as **right, acute, or obtuse**. **Explain** how you know each angle's classification.

b.



c.



3. Use the following instructions to draw a figure in the box below.

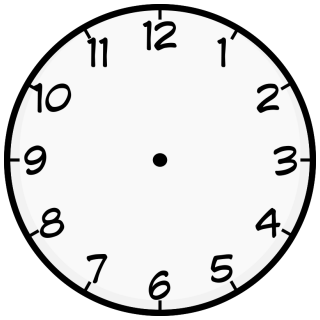
- Using a straightedge (ruler), draw a line. Label it $\overleftrightarrow{AB}$.
- Label a point *A* on $\overleftrightarrow{AB}$.
- Using your protractor and ruler, draw a line perpendicular to $\overleftrightarrow{AB}$ through point C.
- Label the perpendicular line $\overleftrightarrow{DE}$.
- Label a point F on $\overleftrightarrow{DE}$, other than point C.
- Using your protractor and straightedge, draw a line, $\overleftrightarrow{GH}$, perpendicular to $\overleftrightarrow{DE}$ through point F.

Which lines are **parallel** in your drawing? Explain why.

4. Use the clock to answer the following:

   a. Use a straightedge to **draw the hands on the clock** as they would appear at 9:00.

   b. What kind of angle is formed by the clock hands at 9:00?



   c. Starting with that time, will it be when the minute hand has turned 180° ?

   d. How many 90° turns will the minute hand make between 9:00 and 10:00?

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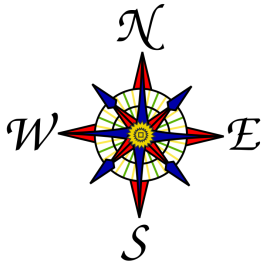
5. Use the compass rose to answer the following:



   a. Chris faced South. He turned to his right until he was facing North.

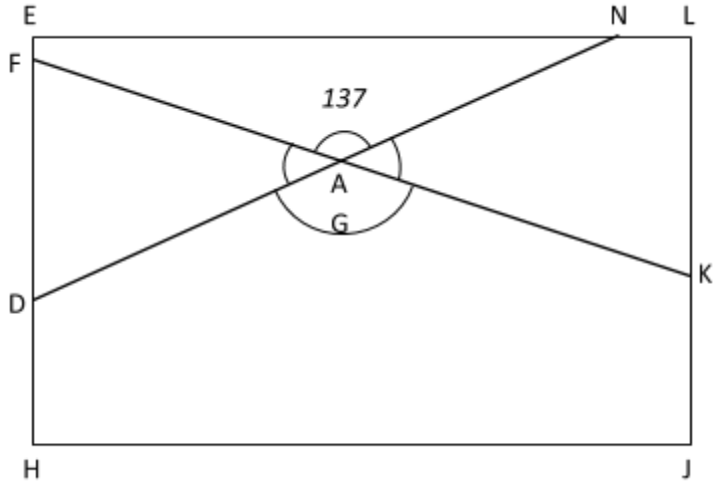
How many degrees did he turn? _____

   b. Karen was facing West. She turned toward her left until she faced South. Sarah was facing North. She turned toward her right until she faced East.

What **fraction of a full turn** did each girl complete? _____

Through **how many degrees** did each girl turn? _____

6. The city of San Jose has a large rectangular park with a running track around its perimeter and two straight-line cross walks that cut across it as shown in the diagram below.



a. Find the measure of the following angles using a protractor.

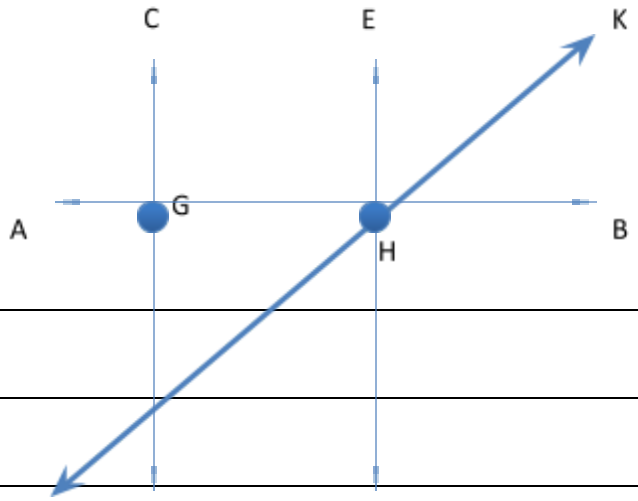
$\angle FAD:$

$\angle DAK:$

$\angle KAN:$

b. In the space below, use a protractor to draw an angle with the same measure as $\angle DAK$.

c. Using the points in the figure below, identify a line segment, a right angle, an obtuse angle, a set of parallel lines, and a set of perpendicular lines. Write them in the table below.



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