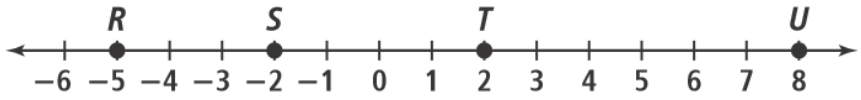
Name: _____ Date: _____ Period: _____

1.1-1.3 Review Packet

1. Connect the asterisks from each vocabulary word to its corresponding definition or description.

Point *	* A part of a line that has an endpoint and extends infinitely in one direction
Segment *	* A line, ray, or segment that splits a geometric figure into two congruent pieces
Ray *	* Points that lie on the same line
Plane *	* A location; has no size. Best represented by a small dot
Collinear *	* All points that extend in a straight path infinitely in opposite directions
Bisector *	* A part of a line consisting of two endpoints and all the points between them
Line *	* An infinite number of points that lie on a flat surface; extends without end and has no thickness

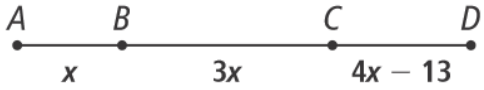
2. Using the figure below, find each indicated length.



a. RS = _____ **b.** RT = _____ **c.** ST = _____ **d.** RU = _____

3. Points A, B, C, and D on the figure below are collinear. Use the figure to answer each question.

a. If $AC = 24$, what is AB? **b.** If $BC = 15$, what is BD?

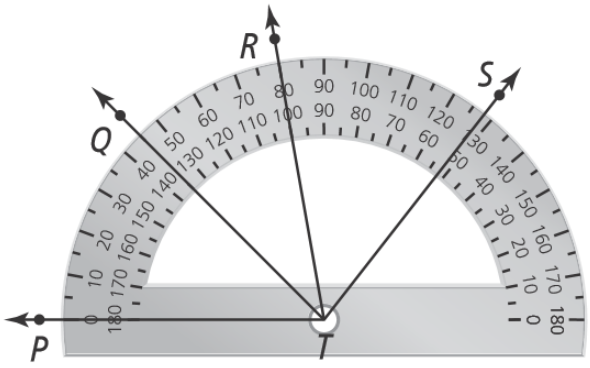


4. Use the figure of the protractor to answer the questions below.

a. What is $m\angle PTR$?

b. What is $m\angle PTQ$?

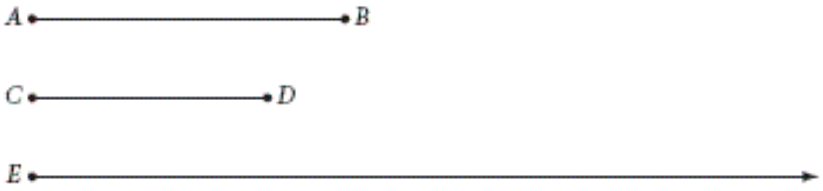
c. What is $m\angle QTS$?



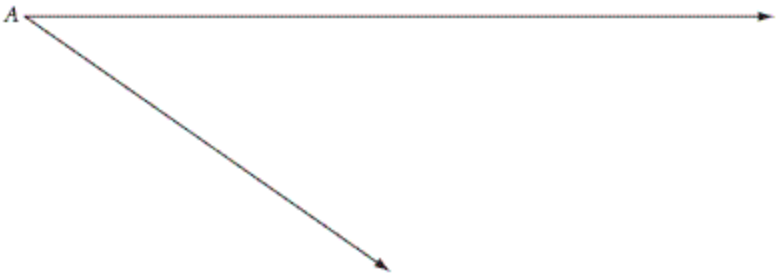
d. Luis said that $m\angle QTR = 80°$. Explain Luis's error.

Name: _____ Date: _____ Period: _____

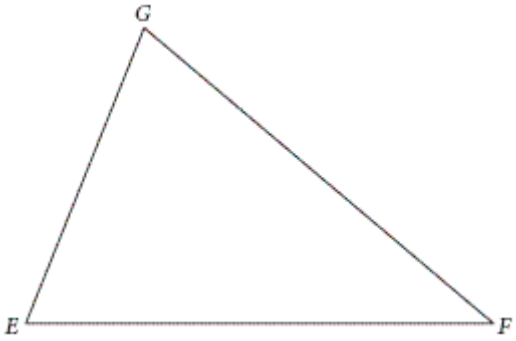
5. On the ray that's provided, construct segment $\overline{EF}$ with $EF = \frac{1}{2}(AB + CD)$.



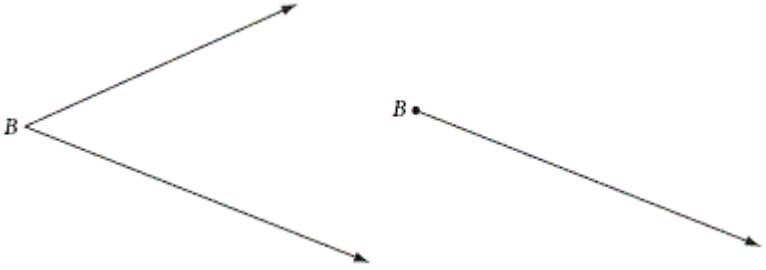
6. Bisect $\angle A$. Use a protractor to measure the two resulting angles and compare this to the original measure of $\angle A$.



7. Locate the midpoint of $\overline{EF}$, point *H*, on the triangle below. Then construct $\overline{GH}$ to make a median in the triangle.

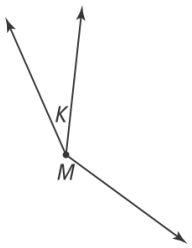


8. Duplicate $\angle B$ on the ray that is provided.



Name: _____ Date: _____ Period: _____

9. In the figure to the right, $\angle M$ is bisected twice to form $\angle K$. Write an equation that relates $m\angle M$ to $m\angle K$.

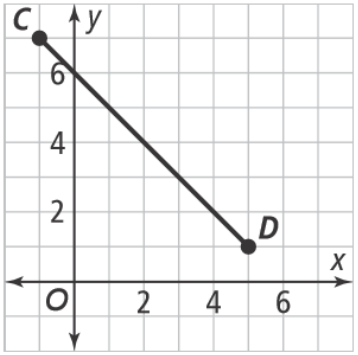


10. Find the midpoint of each segment with the given endpoints.

a. $A(-4,6)$ and $B(10,-10)$ **b.** $C(-3,-8)$ and $D(-6.5,-4.5)$ **c.** $E(3,7)$ and $F(-8,-10)$

11. Given the graph of $\overline{CD}$, find the coordinates of each point described in relation to $\overline{CD}$.

a. $\frac{2}{3}$ of the way from D to C **b.** $\frac{1}{2}$ of the way from C to D



12. Find the distance between each pair of points. If necessary, round to two decimal places.

a. $A(6,8)$ and $B(-1,8)$ **b.** $C(5,-6)$ and $D(5,6)$ **c.** $E(-2,0)$ and $F(11,3)$

13. An interior designer is looking at a certain layout of a bedroom. In the picture, the axes represent the walls of a bedroom. One corner of the bedroom is the origin. What is the distance from that corner of the room to the corner of the bed that is farthest away? Round to two decimal places, if necessary.