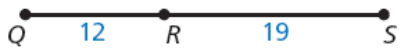
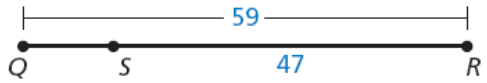
Name: Date: Period:

Unit 1 Review

Find the length of $\overline{QS}$. Explain how you found your answer.

1. 

2. 

Find the coordinates of the midpoint M. Then find the distance between the two points.

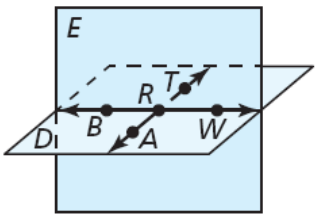
3. $A(-4, -8)$ and $B(-1, 4)$

4. $C(-1, 7)$ and $D(-8, -3)$

5. The midpoint of $\overline{EF}$ is $M(1, -1)$. One endpoint is $E(-3, 2)$. Find the coordinates of endpoint F.

Use the diagram to decide whether the statement is true or false.

6. Points A, R, and B are collinear.
7. $\overleftrightarrow{BW}$ and $\overleftrightarrow{AT}$ are lines.
8. $\overrightarrow{BR}$ and $\overrightarrow{RT}$ are opposite rays.
9. Plane D could also be named plane ART.



9.5 Use the drawing for 6-9 to answer these questions:

a) Name a ray that is not named in problems 6-9

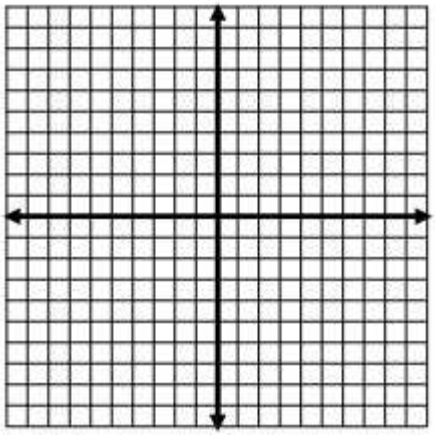
b) Name the intersection of the two planes

c) Name the intersection of $\overleftrightarrow{BW}$ and $\overleftrightarrow{AT}$

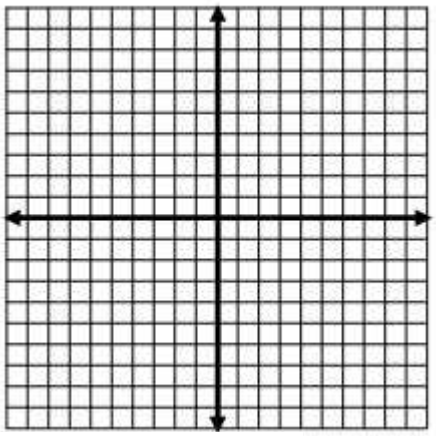
d) Are points A, B, W, T coplanar? Explain why.

Find the perimeter and area of the polygon with the given vertices. Explain how you found your answer.

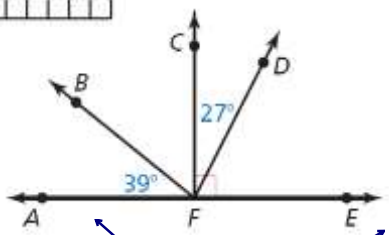
10. $P(-3, 4), Q(1, 4), R(-3, -2), S(3, -2)$



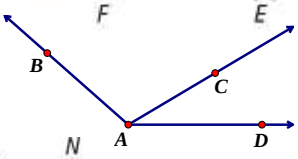
11. $J(-1, 3), K(5, 3), L(2, -2)$



12. In the diagram, $\angle AFE$ is a straight angle and $\angle CFE$ is a right angle. Identify all supplementary and complementary angles. Explain. Then find $m\angle DFE$, $m\angle BFC$, and $m\angle BFE$.

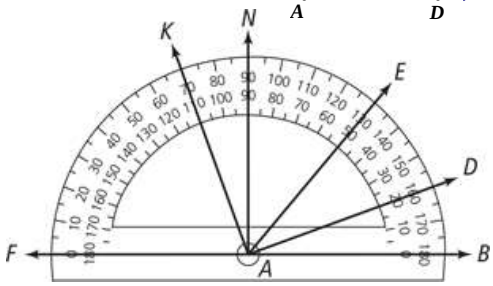


13. If $m\angle BAC = (5x + 10)°$, $m\angle CAD = (2x + 10)°$ $m\angle BAD = 160°$, solve for x and find the measure of the angles.



14. Use the protractor to the right to find the measure of these angles and **classify the angle types**:

$m\angle BAE =$ $m\angle DAK =$



15. Draw an example of the following types of angle pairs. Name the angles with a 1 and 2.

a. Linear Pair

b. Vertical angles

c. Supplementary Angles

d. Complementary Angles

e. Adjacent Angless