

Module 1 Review

- Find the length of  $\overline{CD}$  with endpoints  $C(-2,5)$  and  $D(-1,1)$ . (You may leave your answer as a radical or round to the nearest tenth.)
- Find the length of  $\overline{JK}$  with endpoints  $J(2, -1)$  and  $K(3, -5)$ . (You may leave your answer as a radical or round to the nearest tenth.)
- Find the midpoint of  $\overline{CD}$  from Problem 1.
- Find the midpoint of  $\overline{JK}$  from Problem 2.

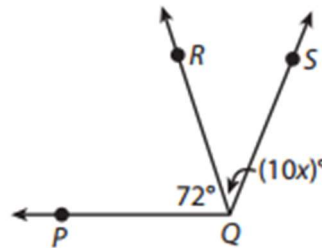
- Indicate whether each of the following names the angle accurately.



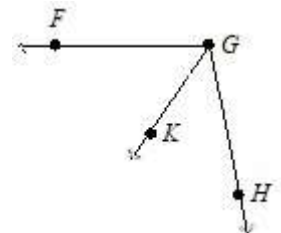
Yes                      No

A. $\angle B$		
B. $\angle BNT$		
C. $\angle TBN$		
D. $\angle NBT$		

- Find the value of  $x$  given that  $m\angle PQS = 112^\circ$ .



- $\overrightarrow{GK}$  bisects  $\angle FGH$ . If  $m\angle FGH = 120^\circ$  and  $m\angle FGH = (3x + 6)^\circ$ , solve for  $x$ .

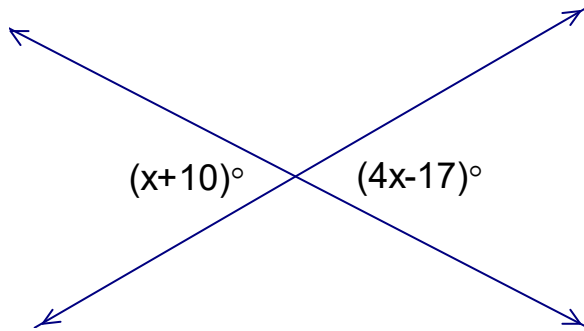


8.  $M$  is the midpoint of  $\overline{AB}$ . If  $AM = 2x + 4$  and  $MB = 20$ , solve for  $x$ . [Draw the picture and label it correctly.]

9.  $\angle ABC$  and  $\angle CBD$  form a linear pair. What is  $m\angle ABC$  if  $m\angle CBD = 27^\circ$ ? [Draw a picture]

10.  $P$  is between points  $W$  and  $S$ . If  $WP = 7x + 9$ ,  $PS = 2x - 13$ , and  $WS = 77$ , find  $WP$ . [Draw a picture.]

11. Find  $x$ .

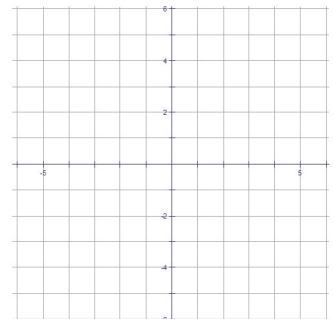


12. What word describes an angle whose measure is greater than  $90^\circ$  and less than  $180^\circ$ ?

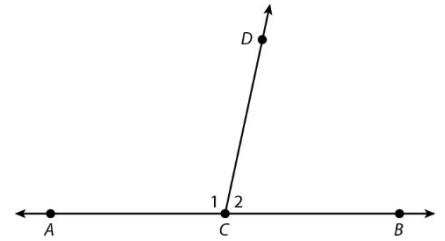
- A acute
- B obtuse
- C straight

13.  $\overline{XY}$  has endpoints at  $X(-2, 7)$  and  $Y(3, 1)$ .

- a. Find the length of  $\overline{XY}$ .
- b. Find the coordinates of the midpoint of  $\overline{XY}$ .

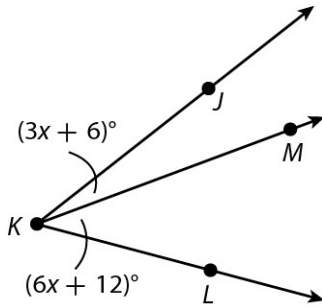


14. In the figure at right, use the letters to give two other names for  $\angle 1$ .

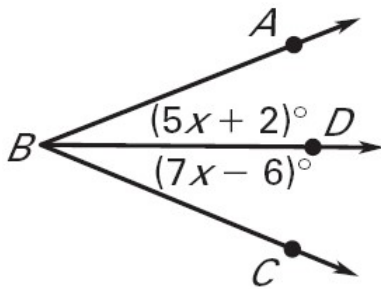


15. If  $m\angle 1 = 2x$  and  $m\angle 2 = x$ , what is  $m\angle 1$  and  $m\angle 2$ ?

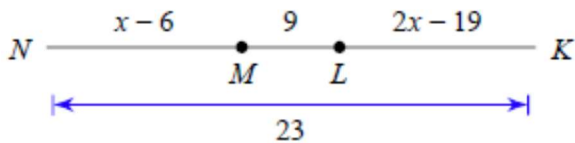
16. If  $m\angle JKL = 72^\circ$ , find  $x$  and  $m\angle JKM$ .



17. In the diagram below,  $\overrightarrow{BD}$  bisects  $\angle ABC$ . Find  $x$  and  $m\angle ABC$ .



18. Find  $x$  and the length of  $\overline{LK}$ .



19. Point  $M$  is the midpoint of  $\overline{PQ}$ . If  $P(10,4)$  and  $M(18,1)$ , find the coordinates of Point  $Q$ .

Review vocab from this module:

- Point
- Collinear
- Line
- Line Segment
- Ray
- Plane
- Coplanar
- Measure of a segment
- Midpoint
- Segment Bisector
- Angle
- Angle Measure
- Acute Angle
- Obtuse Angle
- Right Angle
- Straight Angle
- Angle Bisector
- Complementary Angles
- Supplementary Angles
- Vertical Angles
- Linear Pair

Distance Formula:  $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

Midpoint Formula:  $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$