19) Suppose $J$ is between $H$ and $K$. Use the Segment Addition Postulate to solve for $x$. Then find the length of each segment.

- $HJ = 2x + 4$
- $JK = 3x + 3$
- $KH = 22$

20) Find the coordinate of the midpoint of a segment with the given endpoints $A$ and $B$.

$A(-3, 5)$ and $B(5, -1)$. 
21) Find the coordinates of the other endpoint of the segment with the given endpoint \( A \) and midpoint \( M \). \( A(-4, 3) \) and \( M(-1, -1) \)

True or False?

a) \( \overline{AB} = \overline{BA} \)

b) \( \overline{AB} = \overline{BA} \)

c) \( \overline{AB} = \overline{BA} \)

d) \( \overline{AB} = \overline{BA} \)

e) \( AB = BA \)
E is the midpoint of $DF$.

a) $DE = 2x - 3, EF = 5x - 24$. Solve for $x$.

b) $GE = z, GH = 4z + 6, EH = 30$. Solve for $z$.

c) If $D(6, 3)$ and $F(-4, -3)$, find the coordinates of $E$.

d) If $D(7, 3)$ and $E(2, 1)$, find the coordinates of $F$.

$M$ is between $O$ and $P$ with the following measurements:

$OM = x + 8$

$MP = 2x - 6$

$OP = 44$

Is $M$ the midpoint of $OP$? Justify your answer with an explanation.
Point $T$ is the midpoint of $RS$. $W$ is the midpoint of $RT$ and $Z$ is the midpoint of $WS$. If the length of $TZ$ is $x$, find the lengths of $RW$, $WZ$, and $RS$ terms of $x$.

$A$, $B$, and $C$ are three points on a number line. 

$AC = BC = 5$. The coordinate of $C$ is 8, and the coordinate of $A$ is greater than the coordinate of $B$. 

What are the coordinates of $A$ and $B$?
Solve for $x$ and $y$.

$4 - y - y - 2x - 3y = 30$

$\boxed{x}$

$G$, $H$, and $K$ are three points on a number line. The coordinates of $G$ and $H$ are 4 and -3 respectively. If $H$ is between $G$ and $K$ and $GK = 13$, what is the coordinate of $K$?
$B$, the midpoint of $AC$, has a coordinate of 5. If the coordinate of $A$ is greater than the coordinate of $C$, and if $BC = 9$, what are the coordinates of $A$ and $C$?

A segment has midpoint $M(3, -5)$ and one endpoint is $A(2, -4)$. What are the coordinates of $B$, the other endpoint?
Solve for $x$.

\[ 3x \quad 2x + 15 \quad 9x \]

If $U$ is between $T$ and $B$, find the value of $x$ and the length of $TU$.

$TU = 1 - x$, $TB = -3x$, $UB = 4x + 17$. 
Find the length of the segment in inches, centimeters, and millimeters.

In the figure, $CX$ bisects $AB$, $AX = 2x + 11$, and $XB = 4x - 5$. Find the length of $AB$. 
Use a ruler to find the perimeter of the rectangle in inches.

$A(-4.5, 1.5)$
$B(6, 1.5)$
$C(-4.5, 8)$
$D(6, 1.5)$

Find each length.

$AB =$
$AC =$
$BD =$
Find $x$ and the perimeter.