Write an explanation to answer the question.
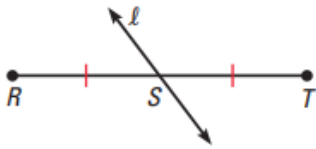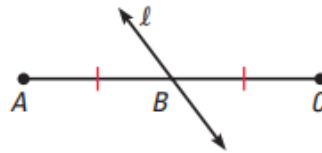
1.) Explain what it means to *bisect* a segment. Why is in impossible to bisect a line?

In exercises 2-7, find the indicated length
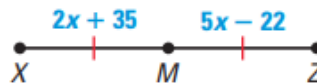
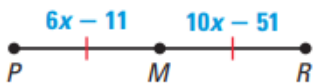2.) Find RT if $RS = 5\frac{1}{8}$ in.

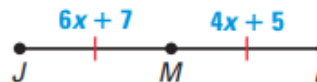3.) Find BC if $AC = 19$ cm.

4.) Find AM.

5.) Find XZ.

6.) Find PR.

7.) Find JM.

In 8, draw and label a diagram, then find the indicated length.

8.) Line RS bisects segment PQ at point R. Find RQ if $PQ = 4.5$ inches.

Find the coordinates of the _midpoint_ of the segment with the given endpoints.
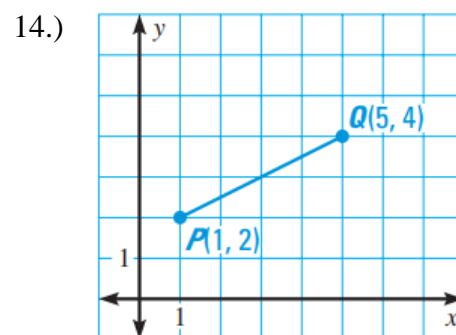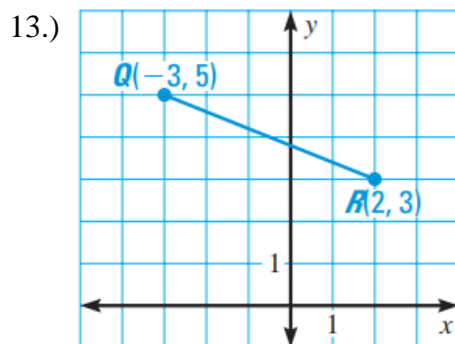
9.) $C(3, 5)$ and $D(7, 5)$ 10.) $P(-8, -7)$ and $Q(11, 5)$

In exercises 11-12, use the given endpoint R and the _midpoint_ M of $\overline{RS}$ to find the coordinates of the other endpoint S.

11.) $R(3, 0)$, $M(0, 5)$ 12.) $R(-4, -6)$, $M(3, -4)$

Find the length of the segment using the distance formula.

13.)

14.)

In 15, draw and label a diagram before finding the indicated segment.

15.) Point M is the midpoint of $\overline{JK}$, $JM = \frac{x}{8}$, and $JK = \frac{3x}{4} - 6$. Find MK.