Name _____ Date _____

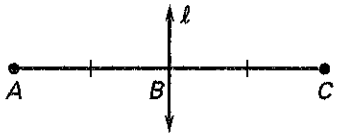
LESSON 1.3

Practice A

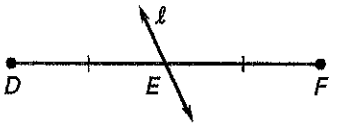
For use with the lesson "Use Midpoint and Distance Formulas"

Line ℓ bisects the segment. Find the indicated length.

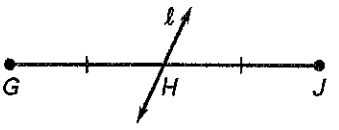
1. Find AC if $AB = 6$ cm.



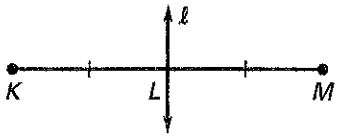
2. Find DF if $DE = 17$ cm.



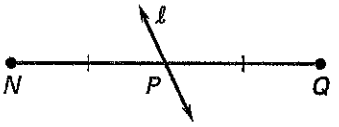
3. Find GJ if $HJ = 8\frac{1}{4}$ in.



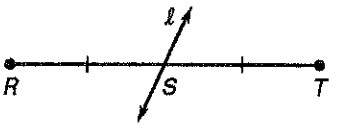
4. Find LM if $KM = 24\frac{3}{4}$ in.



5. Find NP if $NQ = 31.8$ cm.



6. Find ST if $RT = 109$ in.



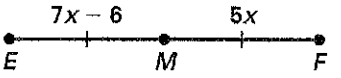
7. Line CD bisects $\overline{AB}$ at point C. Find AC if $AB = 56$ feet.

8. Point W bisects $\overline{UV}$. Find UV if $WV = 11\frac{1}{8}$ inches.

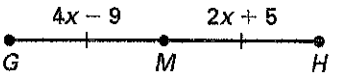
In each diagram, *M* is the midpoint of the segment. Find the indicated length.

9. Find XM.

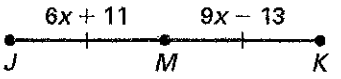
10. Find MF.



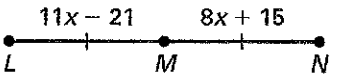
11. Find MH.



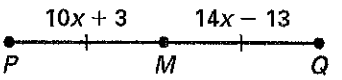
12. Find JK.



13. Find LN.



14. Find PQ.



Find the coordinates of the midpoint of the segment with the given endpoints.

15. $R(3, 1)$ and $S(3, 7)$

16. $V(2, 4)$ and $W(6, 6)$

Use the given endpoint *Y* and midpoint *M* of $\overline{YZ}$ to find the coordinates of the other endpoint *Z*.

17. $Y(0, 5)$, $M(3, 3)$

18. $Y(-1, -3)$, $M(5, 9)$

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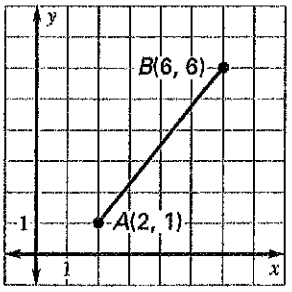
LESSON 1.3

Practice A *continued*

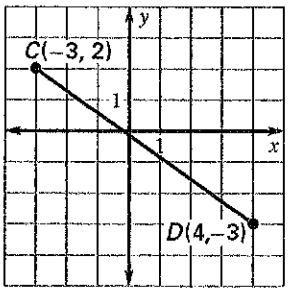
For use with the lesson "Use Midpoint and Distance Formulas"

Find the length of the segment. Round to the nearest tenth of a unit.

19.

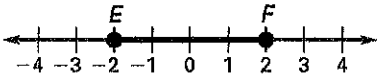


20.

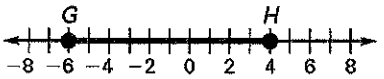


Find the length of the segment. Then find the coordinate of the midpoint of the segment.

21.



22.



The endpoints of two segments are given. Find each segment length. Tell whether the segments are congruent.

23. $\overline{JK}$: $J(1, 1)$, $K(0, 5)$

$\overline{LM}$: $L(1, 1)$, $M(-3, 2)$

24. $\overline{PQ}$: $P(4, 3)$, $Q(-1, 6)$

$\overline{RS}$: $R(2, -3)$, $S(-2, 0)$

25. **Distances** Your house and your school are 8.4 miles apart on the same straight road. A baseball field is halfway between your house and your school, on the same road.

a. Draw a sketch to represent this situation. Mark the locations of the house, school, and field. How far is your house from the baseball field?

b. You walk at an average speed of 3 miles per hour. About how long would it take you to walk from your house to the baseball field?

26. **Soccer** The diagram shows the position of three soccer players. Player A kicks the ball to Player B, who then kicks it to Player C. How far did Player A kick the ball? How far did Player B kick the ball? How far would Player A have kicked the ball if she had kicked it directly to Player C? Round all answers to the nearest tenth of a yard.