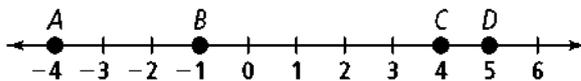


1-3 Practice

Measuring Segments

Form G

In Exercises 1–6, use the figure below. Find the length of each segment.



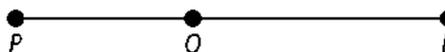
1. \overline{AB}

3. \overline{AC}

4. \overline{AD}

6. \overline{CD}

For Exercises 7–11, use the figure at the right.

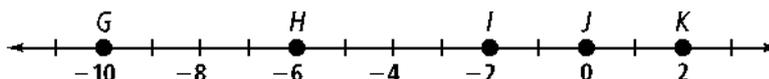


7. If $PQ = 7$ and $QR = 10$, then $PR = \square$.

9. If $PR = 25$ and $PQ = 12$, then $QR = \square$.

11. If $PR = 10$ and $PQ = 4$, then $QR = \square$.

Use the number line below for Exercises 12–16. Tell whether the segments are congruent.



12. \overline{GH} and \overline{HI}

14. \overline{HJ} and \overline{IK}

16. \overline{HJ} and \overline{GI}

17. \overline{HK} and \overline{GI}

Algebra Use the figure at the right for Exercises 19 and 20.



19. Given: $ST = 3x + 3$ and $TU = 2x + 9$.

a. What is the value of ST ?

b. What is the value of TU ?

20. Given: $ST = x + 3$ and $TU = 4x - 6$.

a. What is the value of ST ?

b. What is the value of SU ?

21. **Algebra** On a number line, suppose point E has a coordinate of 3, $EG = 6$, and $EX = 12$. Is point G the midpoint of EX ? What are possible coordinates for G and X ?

1-3 Practice (continued)

Measuring Segments

Form G

On a number line, the coordinates of P , Q , R , and S are -12 , -5 , 0 , and 7 , respectively.

22. Draw a sketch of this number line. Use this sketch to answer Exercises 23–26.

23. Which line segment is the shortest?

24. Which line segment is the longest?

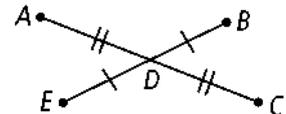
25. Which line segments are congruent?

26. What is the coordinate of the midpoint of \overline{PR} ?

28. **Algebra** Point O lies between points M and P on a line. $OM = 34z$ and $OP = 36z - 7$. If point N is the midpoint of \overline{MP} , what algebraic equation can you use to find MN ?

Algebra Use the diagram at the right for Exercises 29–32.

29. If $AD = 20$ and $AC = 3x + 4$, find the value of x . Then find AC and DC .



31. If $DC = 6x$ and $DA = 4x + 18$, find the value of x . Then find AD , DC , and AC .