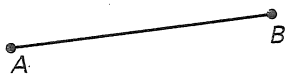
LESSON 1.3

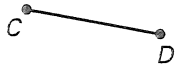
NAME _____ DATE _____

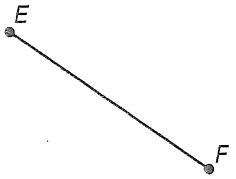
Practice B

For use with pages 17–25

Use a ruler to measure the length of each line segment to the nearest millimeter.

1. 

2. 

3. 

Draw a sketch of the three collinear points. Then write the Segment Addition Postulate for the points.

4. A is between T and Q.

5. M is between H and A.

6. J is between S and H.

7. A is between L and B.

In Exercises 8–11, use the following information.

S is between T and V. R is between S and T. T is between R and Q. $QV = 18$, $QT = 6$, and $TR = RS = SV$. Make a sketch and answer the following.

8. Find RS.

9. Find QS.

10. Find TS.

11. Find TV.

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

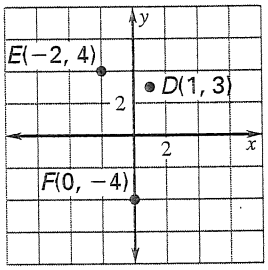
12. $HJ = 2x + 4$
$JK = 3x + 3$
$KH = 22$

13. $HJ = 5x - 3$
$JK = 8x - 9$
$KH = 131$

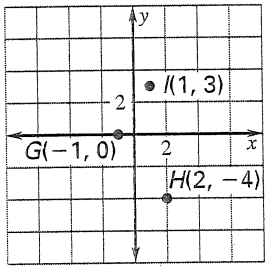
14. $HJ = 2x + \frac{1}{3}$
$JK = 5x + \frac{2}{3}$
$KH = 12x - 4$

Find the distance between each pair of points.

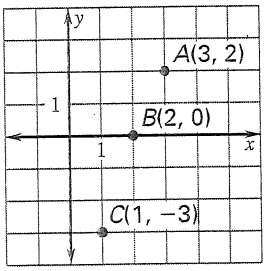
15. $D(1, 3)$, $E(-2, 4)$, $F(0, -4)$



16. $G(-1, 0)$, $H(2, -4)$, $I(1, 3)$



17. $A(3, 2)$, $B(2, 0)$, $C(1, -3)$



18. ***Marathon*** The map at the right is being used to plan a 26.3 mile marathon. Coordinates are given in miles. The locations of the participating towns on the map are: Curtis (0, 0), Clearfield (10, 2), Buster (5, 7), and Angel City (1, 4).

Which of the following planned routes is nearest to the 26.3 mile requirement?

(a) Curtis to Clearfield to Angel City to Curtis
(b) Curtis to Clearfield to Buster to Angel City to Curtis
(c) Curtis to Buster to Clearfield to Curtis
(d) Curtis to Buster to Angel City to Clearfield to Curtis