

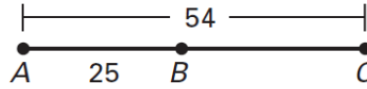
Unit 6.2 Segment Addition Postulate PRACTICE

Use the Segment Addition Postulate to find the indicated length.

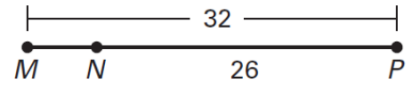
1. Find RT.



2. Find BC.



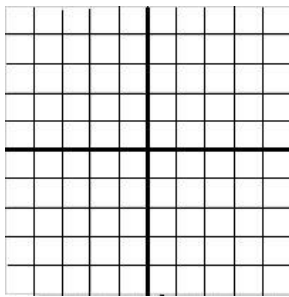
3. Find MN.



Plot the given points in a coordinate plane. Then determine whether the line segments named are congruent.

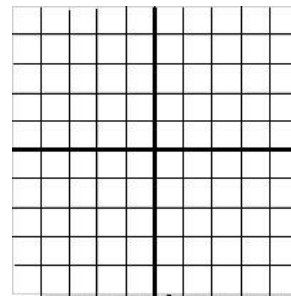
4.  $A(2, 2), B(4, 2), C(-1, -1), D(-1, 1)$

$\overline{AB}$  and  $\overline{CD}$



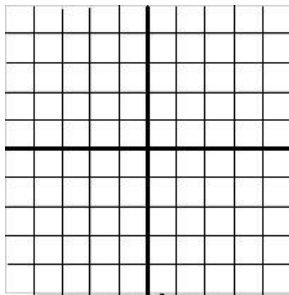
5.  $M(1, -3), N(4, -3), O(3, 4), P(4, 4)$

$\overline{MN}$  and  $\overline{OP}$



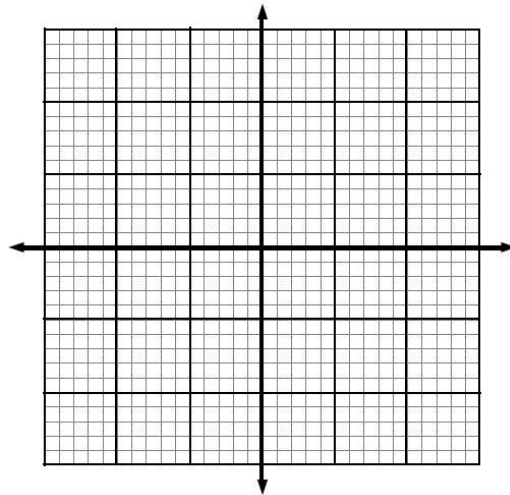
6.  $E(-3, 4), F(-1, 4), G(2, 4), H(-1, 1)$

$\overline{EG}$  and  $\overline{FH}$

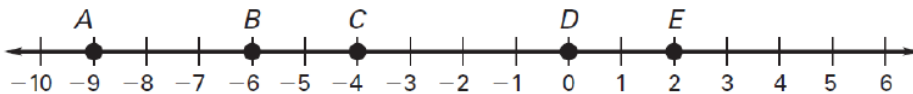


7.  $R(3, 5), S(10, 5), T(-4, -3), U(-11, -3)$

$\overline{RS}$  and  $\overline{TU}$



Use the number line to find the indicated distance.



8. AB

9. AD

10. CD

11. BD

12. CE

13. AE

14. BE

15. DE

In the diagram, points A, B, C, and D are collinear, points C, X, Y, and Z are collinear,  $AB = BC = CX = YZ$ ,  $AD = 54$ ,  $XY = 22$ , and  $XZ = 33$ .

Find the indicated length.

16. AB

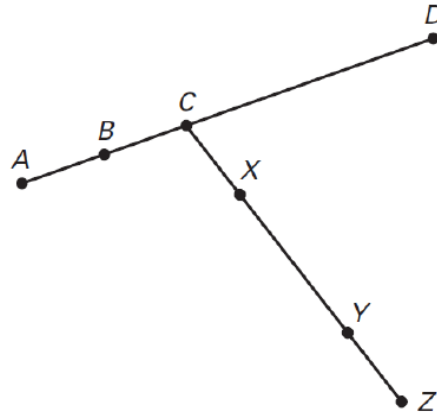
17. BD

18. CY

19. CD

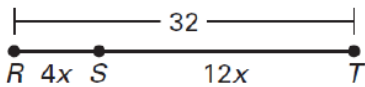
20. XC

21. CZ

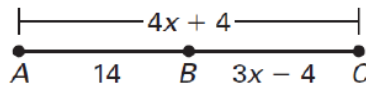


Find the indicated length.

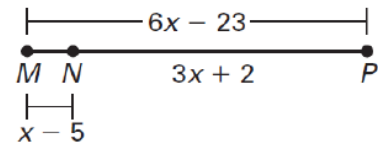
22. Find ST



23. Find AC



24. Find NP



Point J is between H and K on  $\overline{HK}$ . Use the given information to write an equation in terms of  $x$ . Solve the equation. Then find HJ and JK. (Hint draw a picture and label each part.)

25.  $HJ = 2x$   
 $JK = 3x$   
 $KH = 25$

26.  $HJ = \frac{x}{4}$   
 $JK = 3x - 4$   
 $KH = 22$

27.  $HJ = 5x - 4$   
 $JK = 8x - 10$   
 $KH = 38$

28.  $HJ = 5x - 3$   
 $JK = x - 9$   
 $KH = 5x$