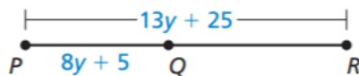


28. **MATHEMATICAL CONNECTIONS** Write an expression for the length of the segment.

a. $\overline{AC}$



b. $\overline{QR}$



29. **MATHEMATICAL CONNECTIONS** Point S is between points R and T on $\overline{RT}$. Use the information to write an equation in terms of x . Then solve the equation and find RS , ST , and RT .

- | | |
|-------------------|-------------------|
| a. $RS = 2x + 10$ | b. $RS = 3x - 16$ |
| $ST = x - 4$ | $ST = 4x - 8$ |
| $RT = 21$ | $RT = 60$ |
| c. $RS = 2x - 8$ | d. $RS = 4x - 9$ |
| $ST = 11$ | $ST = 19$ |
| $RT = x + 10$ | $RT = 8x - 14$ |

28. a. $8x - 1$
b. $5y + 20$

29. a. $3x + 6 = 21$; $x = 5$; $RS = 20$;
 $ST = 1$; $RT = 21$
b. $7x - 24 = 60$; $x = 12$; $RS = 20$;
 $ST = 40$; $RT = 60$
c. $2x + 3 = x + 10$; $x = 7$; $RS = 6$;
 $ST = 11$; $RT = 17$
d. $4x + 10 = 8x - 14$; $x = 6$;
 $RS = 15$; $ST = 19$; $RT = 34$