1-2 Segment Addition

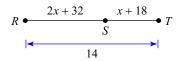
Date_____ Period____

Solve for *x*.

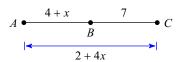
1)
$$P \stackrel{5x-2}{\longleftarrow} 2x-1$$
 Q

Find the length indicated.

3) Find RS



4) Find AC



Points A, B, C, and D are collinear and positioned in that order. Find the length indicated.

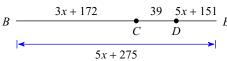
5)
$$AB = 24$$
, $AD = 20x - 12$, $BC = 7x - 3$, and $CD = 3x + 7$. Find BC .

6)
$$BC = 4x - 50$$
, $AC = 17$, $AD = 4x - 29$, and $BD = x + 9$. Find BC .

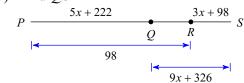
- 7) M is between L and N. LM = 4x 3, MN = 4x - 18, LN = 12x - 45. Find LM, MN, and LN.
- 8) M is between L and N. LM = $\frac{3}{2}y + 3$, MN = $2y + \frac{7}{2}$, LN = 79. Find y.

Find the length indicated.

9) Find *BC*



10) Find *QS*



8)
$$20\frac{5}{7}$$
 or $\frac{145}{7}$