BECA / Dr. Huson / Geometry 05-Transformations Name:
pset ID: 66

5-7DN-Segment-modeling

Do Not Solve!
Label the drawing completely and write an equation in terms of x modeling the situation.

1. Given $\overline{ABC}$, with $AB = x - 1$, $BC = 3x + 4$, and $AC = 19$. Find AB.

2. Given that O bisects $\overline{NP}$. $NO = 3x$, $OP = 4x - 7$. Find x.

3. The points R, S, and T are collinear, with $RS = 3x - 2$ and $ST = 11$. If $RT = 5x + 1$, find RT.

4. The point K is the midpoint of $\overline{JL}$, $JK = 3x + 8$, and $JL = 8x + 36$. Find JK.