Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A2: Measuring and Constructing Segments

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| **Objectives:** | Use length and midpoint of a segment. Construct midpoints and congruent segments. |
| **Develop the Segment Addition Postulate:** |  |
| **Segment Addition Postulate:** | Postulate: If B is between A and C, then AB + BC = AC. |
| **Example 3:**  | 1. B is between A and C, AC=14, and BC=11.4. Find AB.

1. S is between R and T. Find RT.
2. B is the midpoint of AC. AB=5x and BC=3x+4. Find AB, BC, and AC.

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| **Compare and Contrast:**  |

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|  | **B is between A and C.** | **B is the midpoint of** $\overbar{AC}$**.** |
| **Sketch** |  |  |
| **Equation** |  |  |

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| **Challenge Questions:** | 1. HJ is twice JK. J is between H and K. If HJ = 4x and HK = 78, find JK.
2. A, D, N, and X are collinear points. D is between N and A. NA + AX = NX. Draw and diagram that represents this information.
3. Given that J, K, and L are collinear and that K is between J and L, is it possible that JK = JL? If so, draw an example. If not, explain.
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