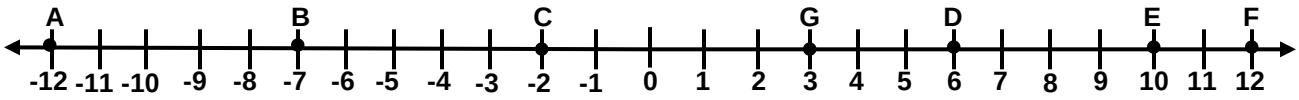
NAME_____DATE_____PER._____

SEGMENTS – MIDPOINT, DISTANCE, ADDITION, BISECTOR

Use the number line below to find the coordinate of the midpoint of each segment.



1. $\overline{AB}$ Midpoint:_____	2. $\overline{CD}$ Midpoint:_____
3. $\overline{AE}$ Midpoint:_____	4. $\overline{GE}$ Midpoint:_____

Given that R is between S and T, find each missing measure.

5. RS = 6, TR = 4.5, TS = _____	6. ST = 15, SR = 6, RT = _____

If U is between T and B, find the value of "x" and the measure of $\overline{TU}$.

7. TU = 2x, UB = 3x + 1, TB = 21

   x = _____

   TU = _____

8. TU = 4x – 1, UB = 2x – 1, TB = 5x

x = _____

TU = _____

9. TU = 1 – x, UB = 4x + 17, TB = -3x

x = _____

TU = _____

Find the indicated values.

10. B is between A and C. AB = 2x + 1, BC = 3x – 4, and AC = 62. Find the value of 'x', and determine if B is a bisector.

x = _____

Bisector: YES or NO?

11. M is between L and N. LM = 7x – 1, MN = 2x + 4, and LN = 12. Find the value of 'x' an determine if M is a bisector.

x = _____

Bisector: YES or NO?

Use the figure below for problems 16-17. $\overline{EC}$ bisects $\overline{AD}$ at C. Find the value of "x" and the measure of the indicated segment.

12. AC = 3x + 6 and CD = 2x + 14

x = _____

AC =_____

13. AC = 5x – 8 and CD = 16 – 3x

x = _____

AD = _____