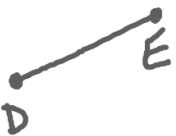


Section 1.2 Linear Measure

term	example	name
line segment has endpoints part of a line CAN be measured		\overline{DE} , \overline{ED} (2 letters)



\overleftrightarrow{GH}

line

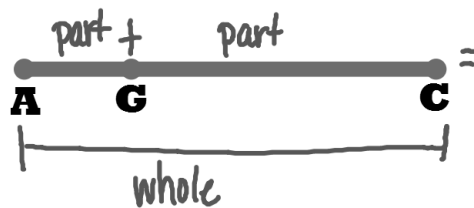
\overline{GH}

line segment

GH

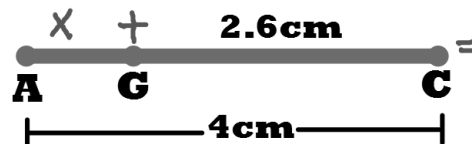
distance from G to H

- Point G is between A & C if A, C, & G are collinear and $AG + GC = AC$



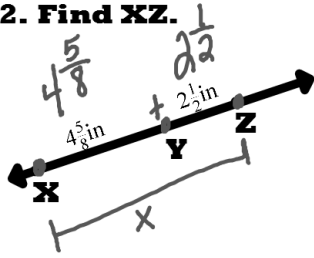
Examples:

1. Find AG.



$$\begin{array}{r}
 X + 2.6 = 4 \\
 -2.6 \quad -2.6 \\
 \hline
 X = 1.4 \text{ cm}
 \end{array}$$

2. Find XZ.



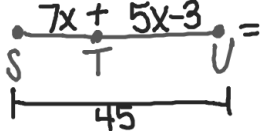
$$4\frac{5}{8} + 2\frac{1}{2} = x$$

$$\frac{37}{8} + \frac{5 \cdot 4}{2 \cdot 4} = \frac{20}{8} + \frac{37}{8} = \frac{57}{8} \text{ in}$$

$$7\frac{1}{8} \text{ in}$$

3. Find x and ST if T is between S and U .

a.) $ST=7x$, $SU=45$ and $TU=5x-3$.



$$7x + 5x - 3 = 45$$

$$12x - 3 = 45$$

$$+3 \quad +3$$

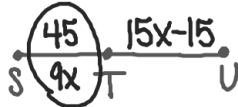
$$\frac{12x}{12} = \frac{48}{12}$$

$$x=4$$

$$ST = 7x = 7(4)$$

$$ST = 28$$

b.) $ST = 45$, $ST = 9x$, $TU = 15x - 15$



$$9x = 45$$

$$\frac{9x}{9} = \frac{45}{9}$$

$$x = 5$$

$$ST = 45$$

• **congruent: having the same measure**

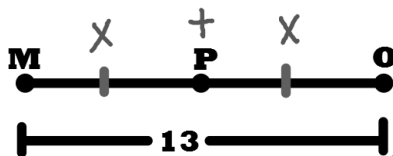
$$\overline{AB} \cong \overline{CD}$$

"is congruent to"

$$\cong$$



4. Find MP.



$$X + X = 13$$

$$\frac{2X}{2} = \frac{13}{2}$$

$$X = \frac{13}{2} \text{ or } 6.5$$

**Turn in:
p. 18 (5 - 9)**

**Homework:
p. 18 (14- 18 evens, 21- 26, 28- 32 evens)**