

## Spiral Review:

**Solve for x.**

$$1. \begin{array}{r} 8x - 4 = 6x + 1 \\ +4 \quad +4 \\ \hline 8x = 6x + 5 \\ -6x \quad -6x \\ \hline 2x = 5 \\ \frac{2x}{2} = \frac{5}{2} \\ x = \frac{5}{2} \end{array}$$

$$2. \begin{array}{r} 3(x - 1) = 9 \\ 3x - 3 = 9 \\ +3 \quad +3 \\ \hline 3x = 12 \\ \frac{3x}{3} = \frac{12}{3} \\ x = 4 \end{array}$$

$$3. 9(x + 2) = -3(x - 4)$$

$$\begin{array}{r} 9x + 18 = -3x + 12 \\ +3x \quad +3x \\ \hline 12x + 18 = 12 \\ -18 \quad -18 \\ \hline 12x = -6 \\ \frac{12x}{12} = \frac{-6}{12} \\ x = -\frac{1}{2} \end{array}$$

$$4. \begin{array}{r} 10x - 5 + 2x = 4x - 6 \\ 12x - 5 = 4x - 6 \\ -4x \quad -4x \\ \hline 8x - 5 = -6 \\ +5 \quad +5 \\ \hline 8x = -1 \\ \frac{8x}{8} = \frac{-1}{8} \\ x = -\frac{1}{8} \end{array}$$

## Review 1.1

**Refer to the figure for Questions 1–5.**

1. Name three collinear points.

A, T, B

2. What is another name for  $\overleftrightarrow{AB}$ ?

$\overleftrightarrow{AT}$

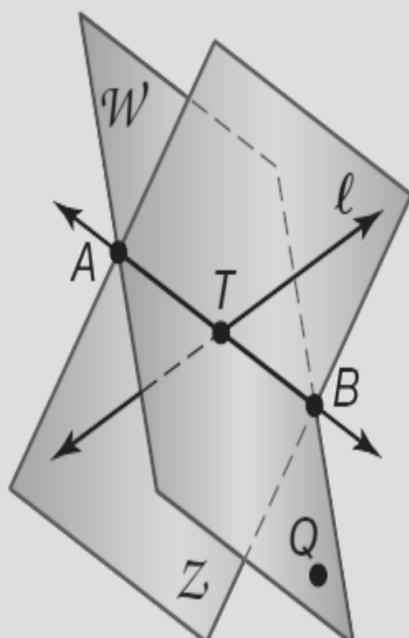
3. Name a line in plane Z.

$\overleftrightarrow{AT}, \ell$

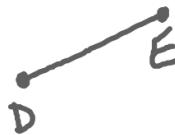
4. Name the intersection of planes Z and W.

$\overleftrightarrow{AB}$

5. How many lines are in plane Z?



## Section 1.2 Linear Measure

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



**GH**

line

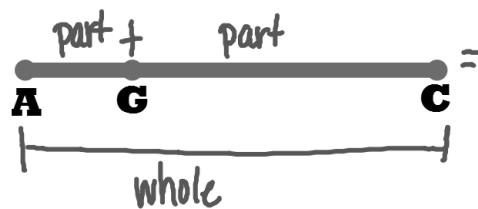
**$\overline{GH}$**

line  
segment

**GH**

distance from  
**G to H**

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



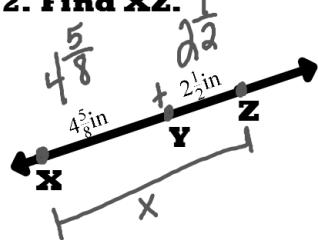
Examples:

1. Find AG.



$$\begin{aligned}
 x + 2.6 &= 4 \\
 -2.6 &\quad -2.6 \\
 \hline
 x &= 1.4 \text{ cm}
 \end{aligned}$$

2. Find  $xz$ .



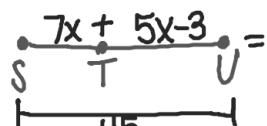
$$\frac{45}{8} + \frac{2\frac{1}{2}}{2} = x$$

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

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

3. Find  $x$  and  $st$  if  $T$  is between  $S$  and  $U$ .

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



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

$$12x - 3 = 45$$

$$\underline{\quad + 3 \quad}$$

$$12x = 48$$

$$\underline{\quad | \quad}$$

$$12$$

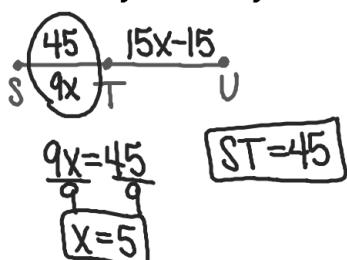
$$x = 4$$

$$ST = 7x$$

$$= 7(4)$$

$$ST = 28$$

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



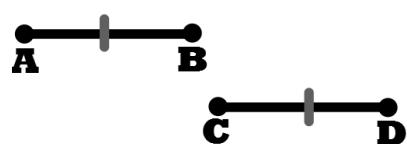
$$\frac{9x}{9} = \frac{45}{9}$$

$$ST = 45$$

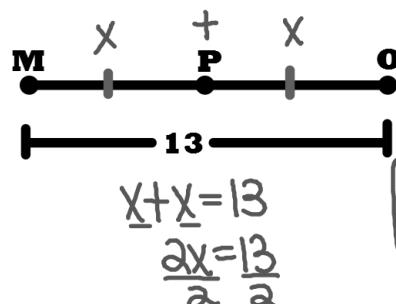
$$x = 5$$

• **congruent:** having the same measure

$\overline{AB} \cong \overline{CD}$   
"is congruent to"



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)**