

# Measuring Segments Assignment

Write the Segment Addition Postulate for the points described.

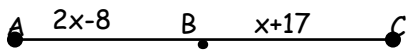
- |                         |                         |
|-------------------------|-------------------------|
| 1. S is between D and P | 2. J is between S and H |
| 3. C is between Q and R | 4. T is between M and N |

Find QR in the following problems.

- |  |  |
|--|--|
| 5. If $RS = 44.6$ and $SQ = 68.4$ , find QR. | 6. If $RS = 33.5$ and $RQ = 80$ , find SQ. |
|--|--|

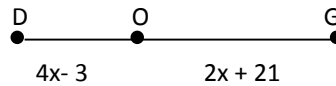
Refer to the figure and the given information to find each measure.

7. Given :  $AC = 39$  m



- X = \_\_\_\_\_  
 AB = \_\_\_\_\_  
 BC = \_\_\_\_\_

8. Given the figure and  $DG = 60$  ft.



- A. Solve for X  
 B. Find the length of segments DO and OG

## Measuring Segments Assignment

C is between A and E. For each problem, draw a picture representing the three points and the information given. Solve for indicated length.

9. If  $AC = 24$  in. and  $CE = 13$  in.,  $AE =$  \_\_\_\_\_.
10. If  $CE = 7$  in. and  $AE = 23$  in.,  $AC =$  \_\_\_\_\_.

If U is between T and B, find the value of x and the measure of  $\overline{TU}$ . (Hint: Draw a picture for each problem with the given information and then write the equation to solve.)

11.  $TU = 2x$ ,  $UB = 3x + 1$ ,  
 $TB = 21$
12.  $TU = 4x - 1$ ,  $UB = 2x - 1$ ,  
 $TB = 5x$
13.  $TU = 1 - x$ ,  $UB = 4x + 17$ ,  
 $TB = -3x$

14. Two segments are congruent if their lengths are equal. The symbol for congruent is  $\cong$ .

# Measuring Segments Assignment

## ANSWERS

Write the Segment Addition Postulate for the points described.

1. S is between D and P

$$D \text{---} S \text{---} P$$

2. J is between S and H

$$S \text{---} J \text{---} H$$

3. C is between Q and R

$$Q \text{---} C \text{---} R$$

4. T is between M and N

$$M \text{---} T \text{---} N$$

Find QR in the following problems.

5. If  $RS = 44.6$  and  $SQ = 68.4$ , find QR.

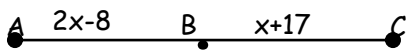
$$QR = 23.8$$

6. If  $RS = 33.5$  and  $RQ = 80$ , find SQ.

$$SQ = 46.5$$

Refer to the figure and the given information to find each measure.

7. Given :  $AC = 39$  m

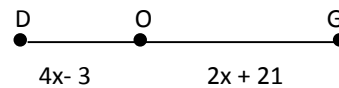


$$X = \underline{10}$$

$$AB = \underline{12\text{m}}$$

$$BC = \underline{27\text{m}}$$

8. Given the figure and  $DG = 60$  ft.



- C. Solve for X

$$X = \underline{7}$$

- D. Find the length of segments DO and OG

$$DO = \underline{25\text{ft.}}$$

$$OG = \underline{35\text{ft.}}$$

## Measuring Segments Assignment

C is between A and E. For each problem, draw a picture representing the three points and the information given. Solve for indicated length.

9. If  $AC = 24$  in. and  $CE = 13$  in.,  $AE =$  37in.

10. If  $CE = 7$  in. and  $AE = 23$  in.,  $AC =$  16in.

A---C---E

A----C-----E

If U is between T and B, find the value of x and the measure of  $\overline{TU}$ . (Hint: Draw a picture for each problem with the given information and then write the equation to solve.)

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

12.  $TU = 4x - 1$ ,  $UB = 2x - 1$ ,  
 $TB = 5x$

13.  $TU = 1 - x$ ,  $UB = 4x + 17$ ,  
 $TB = -3x$

$TU = 8.8$

$X = 4.4$

$TU = 7$

$X = 2$

$TU = 4$

$X = -3$

14. Two segments are congruent if their lengths are equal. The symbol for congruent is  $\cong$ .

**YES**