

Friday, August 29

Objective:

Students will be able to
(SWBAT)

- Solve algebraic equations using the Segment Addition Postulate

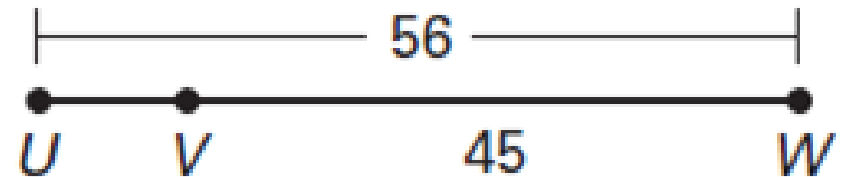
Have homework out on desk to be checked

DO NOW

Find KM .



Find UV .



1.2 Segment Addition Postulate

Agenda:

- **Do Now**
 - ✓ work and solve
 - ✓ Check homework
- **Introduction to New Material**
 - ✓ Segment Addition Postulate
- **Guided Practice**
 - ✓ Using the postulate
- **Independent Practice**
 - ✓ Working on problems
- **Exit Ticket**
 - ✓ TOP 10 RESULTS

1.2 Segment Addition Postulate

SEGMENT ADDITION POSTULATE Find the indicated length.

6. Find MP .



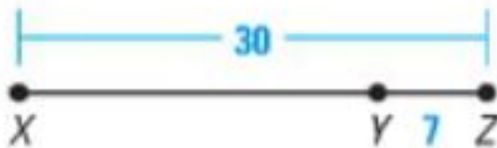
7. Find RT .



8. Find UW .



9. Find XY .



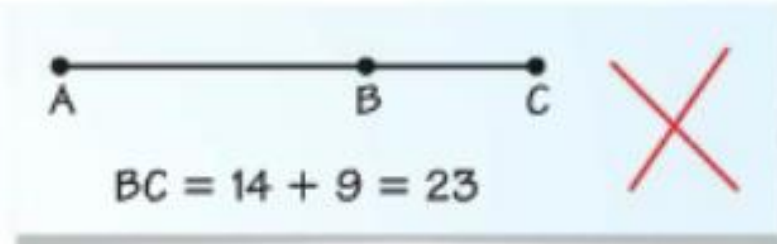
10. Find BC .



11. Find DE .



12. **ERROR ANALYSIS** In the figure at the right, $AC = 14$ and $AB = 9$. Describe and correct the error made in finding BC .



1.2 Segment Addition Postulate

FINDING LENGTHS In the diagram, points V , W , X , Y , and Z are collinear, $VZ = 52$, $XZ = 20$, and $WX = XY = YZ$. Find the indicated length.

21. WX

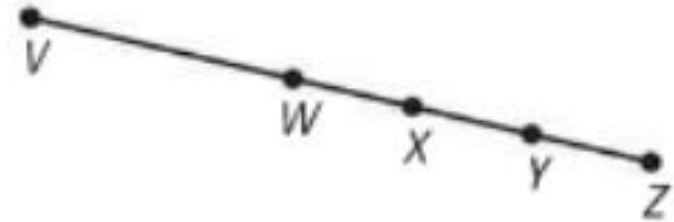
22. VW

23. WY

24. VX

25. WZ

26. VY



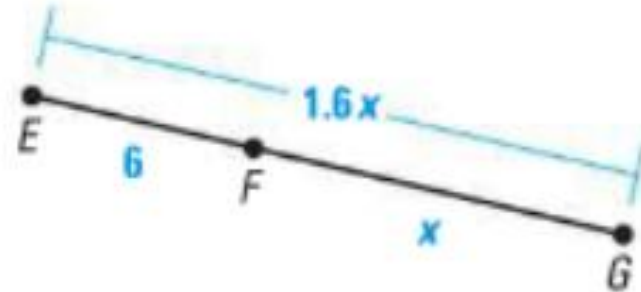
27. **TAKS REASONING** Use the diagram.
What is the length of \overline{EG} ?

(A) 1

(B) 4.4

(C) 10

(D) 16



1.2 Segment Addition Postulate

Find the length of \overline{GB}

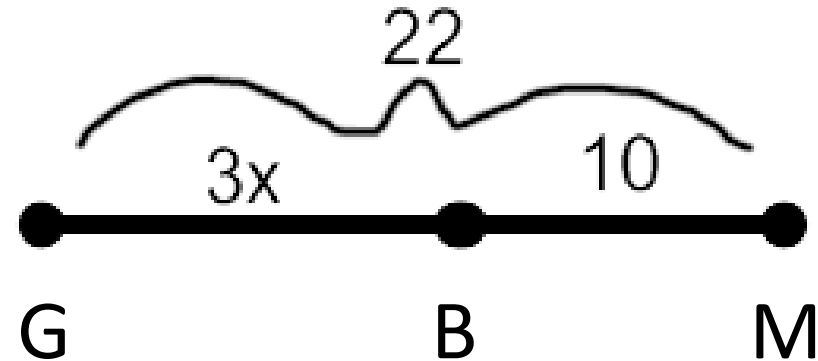
$$\overline{GM} = \overline{GB} + \overline{BM}$$

$$22 = 3x + 10$$

-10 -10

$$\frac{12}{3} = \frac{3x}{3}$$

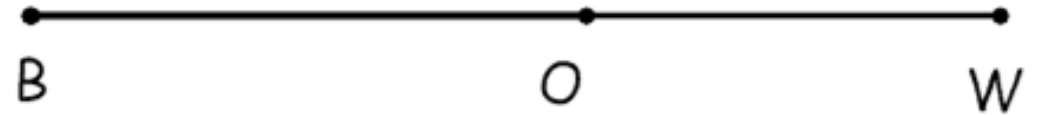
$$4 = x$$



$$\overline{GB} = 3x$$

$$\overline{GB} = 12$$

1.2 Segment Addition Postulate



$$\overline{BW} = \overline{BO} + \overline{OW}$$

$$18 = (2x + 9) + (x - 3)$$

$$18 = 2x + 9 + x - 3$$

$$18 = 3x + 6$$

$$12 = 3x$$

$$4 = x$$

$$\overline{BO} = 2x + 9$$

$$\overline{OW} = x - 3$$

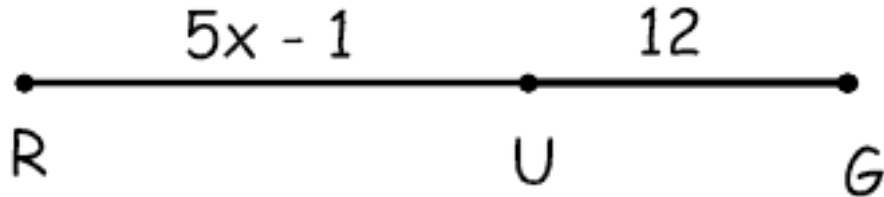
$$\overline{BW} = 18$$

$$x = \underline{4}$$

$$BO = \underline{17}$$

$$OW = \underline{1}$$

1.2 Segment Addition Postulate



$$\overline{RG} = \overline{RU} + \overline{UG}$$

$$RG = x + 43$$

$$x = \underline{8}$$

$$RU = \underline{39}$$

$$RG = \underline{51}$$

$$x + 43 = (5x - 1) + 12$$

$$x + 43 = 5x - 1 + 12$$

$$x + 43 = 5x + 11$$

$$\begin{array}{r} -11 \\ x + 32 = 5x \end{array}$$

$$x + 32 = 5x$$

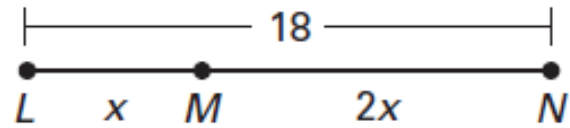
$$\begin{array}{r} -x \\ 32 = 4x \end{array}$$

$$8 = x$$

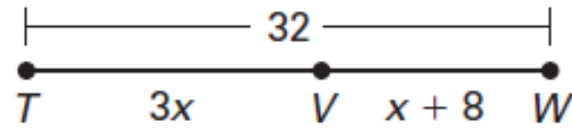
1.2 Segment Addition Postulate

Find the indicated length.

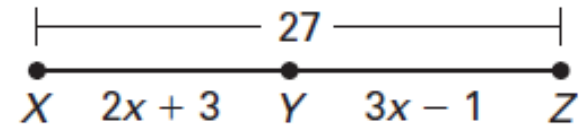
Find LM .



Find VW .



Find YZ .



1.2 Segment Addition Postulate

Find BD

