Thursday, August 28

Objective:

Students will be able to (SWBAT)

- Find lengths of segments using the Segment Addition Postulate

DO NOW

Sketch the figure described

① Three lines that intersect at one point

② Lines $\overleftrightarrow{AB}$ and $\overleftrightarrow{DF}$ are skew

Have homework out on desk to be checked

Write this in your warm-up sheet

HW: p. **p12-13 6-12 even, 22-26 even, 27**

Algebra 1 Review Due Tomorrow!

2.3 Subtracting Real Numbers

Agenda:

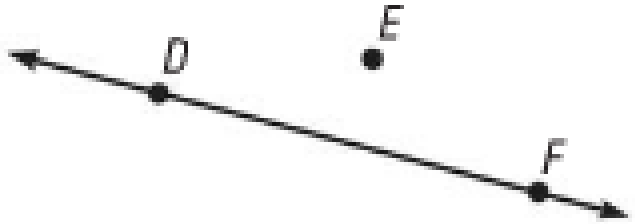
- **Do Now**
  - ✓work and solve
  - ✓Check homework
- **Introduction to New Material**
  - ✓Segment Addition Postulate
- **Guided Practice**
  - ✓Using the postulate
- **Independent Practice**
  - ✓Working on problems
- **Exit Ticket**
  - ✓TOP 10 RESULTS

HW: p. p12-13 6-12 even, 22-26 even, 27 Algebra 1 Review Due Tomorrow!

1.2 Segment Addition

When three points are collinear, you can say that one point is between the other two.

Point *B* is between points *A* and *C*.



Point *E* is not between points *D* and *F*.

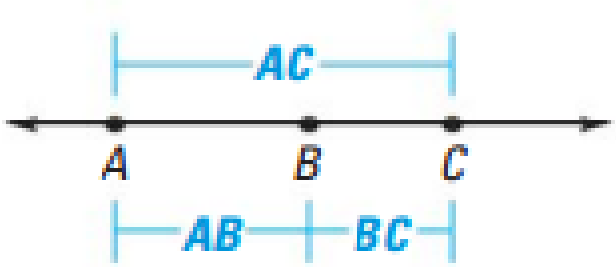
HW: p. p12-13 6-12 even, 22-26 even, 27 Algebra 1 Review
Due Tomorrow!

1.2 Segment Addition

POSTULATE 2 Segment Addition Postulate

If B is between A and C, then $AB + BC = AC$.

If $AB + BC = AC$, then B is between A and C.



HW: p. p12-13 6-12 even, 22-26 even, 27 Algebra 1 Review
Due Tomorrow!

1.2 Segment Addition

Use the given distances to find the distance from Lubbock, Texas, to St. Louis, Missouri

$$\overline{LS} = \overline{LT} + \overline{TS}$$

$$\overline{LS} = 380 + 360$$

$$\overline{LS} = 740 \text{ miles}$$

HW: p. p12-13 6-12 even, 22-26 even, 27 Algebra 1 Review
Due Tomorrow!

1.2 Segment Addition

Use the diagram to find *GH*.

Use the Segment Addition Postulate to write an equation.

$$\overline{FH} = \overline{FG} + \overline{GH}$$

$$36 = 21 + \overline{GH}$$

$$-21 \quad -21$$

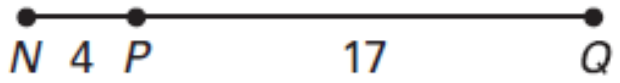
$$15 = \overline{GH}$$

HW: p. p12-13 6-12 even, 22-26 even, 27 Algebra 1 Review
Due Tomorrow!

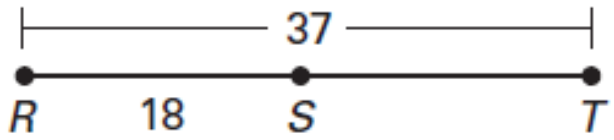
1.2 Segment Addition

Find the indicated length.

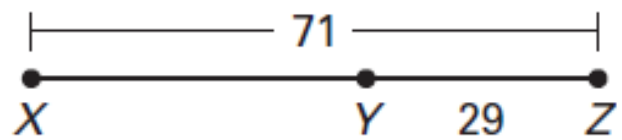
1. Find NQ.



2. Find ST.



3. Find XY.



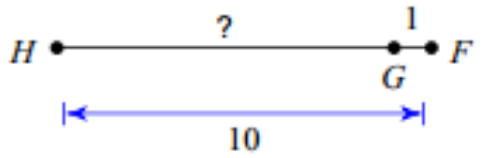
$\overline{NQ} = 21$

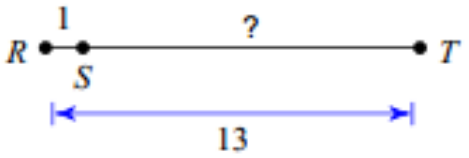
$\overline{ST} = 19$

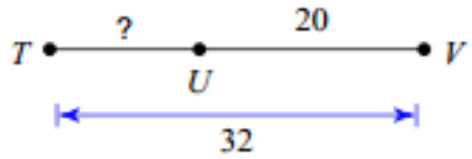
$\overline{XY} = 42$

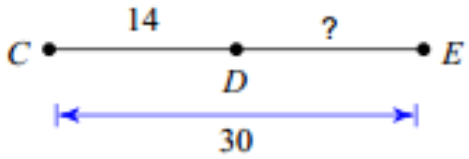
HW: p. p12-13 6-12 even, 22-26 even, 27 Algebra 1 Review
Due Tomorrow!

1.2 Segment Addition

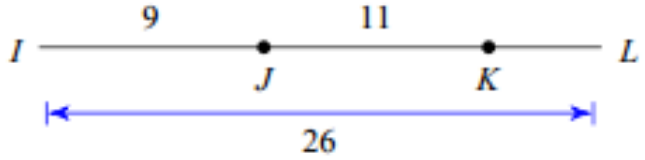
1) 

2) 

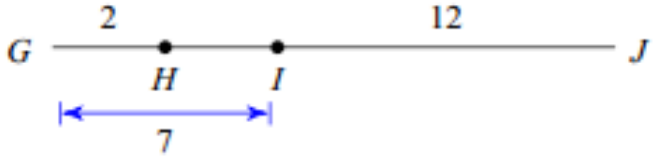
3) 

4) 

5) Find KL



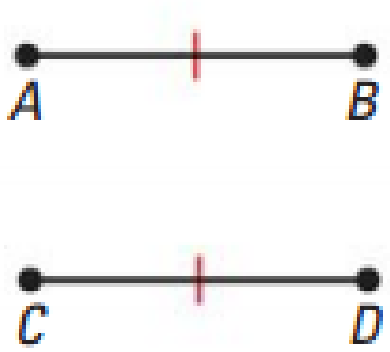
6) Find HJ



Due Tomorrow!

1.2 Segment Addition

Line segments that have the same length are called congruent segments



Lengths are equal.

$AB = CD$

"is equal to"

Segments are congruent.

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

"is congruent to"

HW: p. p12-13 6-12 even, 22-26 even, 27 Algebra 1 Review
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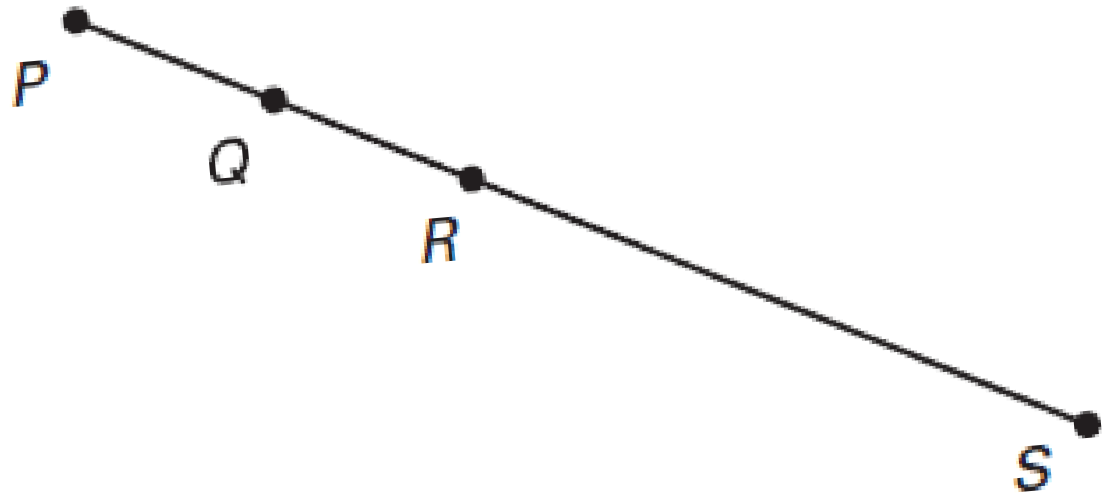
1.2 Segment Addition

In the diagram, points *P*, *Q*, *R*, and *S* are collinear, *PS* = 46, *PR* = 18, and *PQ* = *QR*. Find the indicated length.



1. PQ 9
2. QR 9
3. QS 37
4. RS 28

HW: p. p12-13 6-12 even, 22-26 even, 27 Algebra 1 Review
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1.2 Segment Addition

If CS = 15, CA = 7, ST = 4
Find AT.

$$\overline{CS} = \overline{CA} + \overline{AT} + \overline{TS}$$

$$15 = 7 + x + 4$$

$$15 = 11 + x$$

$$-11 \quad -11$$

$$4 = x$$

HW: p. p12-13 6-12 even, 22-26 even, 27 Algebra 1 Review
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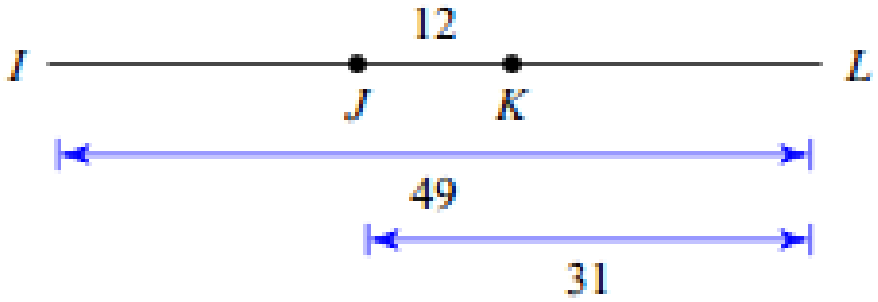
1.2 Segment Addition

EXIT TICKET

Find IK



Find AC if $AB = 13$ and $BC = 9$.

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