Mathematics Class Slides

Bronx Early College Academy

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7-15 October 2020

1.9 Review vocabulary and segment calculations, 9 October

GQ: How do we measure line segments?

CCSS: HSG.CO.A.1 Know precise geometric definitions 1.9 Wednesday 9 Oct

Do Now: Assignments self-assessment

1. Check all assignments, they must be turned in today
2. Have you completed Deltamath? Khan Academy? the 1.5 worksheet?

Lesson: 1.5 worksheet
Construction of a perpendicular bisector
Review and practice of vocabulary, line segments, and congruence

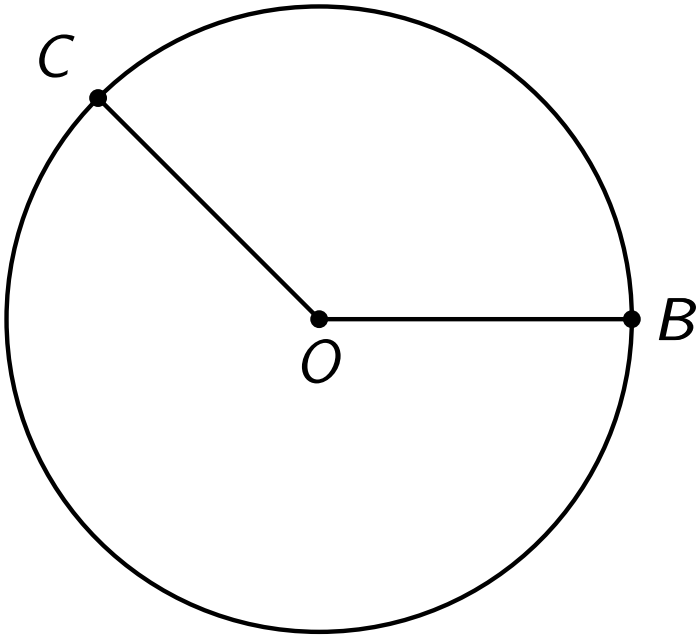
1) Diagrams and notation

Given the points R and S, draw ray $\overrightarrow{SR}$.

2) Diagrams and notation

In circle O, which radius is longer? $\overline{OB}$ or $\overline{OC}$

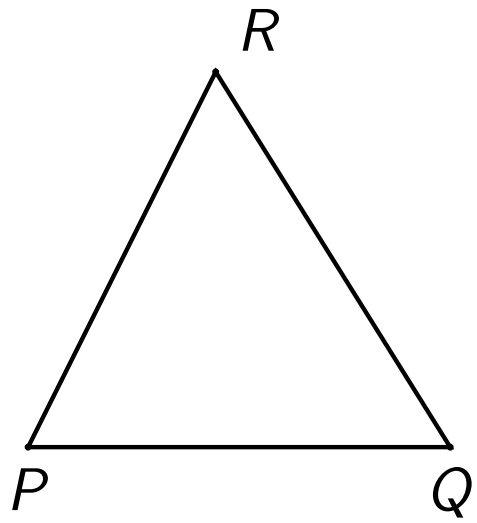
1. $OB > OC$
2. $OB < OC$
3. $OB = OC$



3) Diagrams and notation

Given isosceles $\triangle PQR$ with $\overline{PQ} \cong \overline{QR}$.

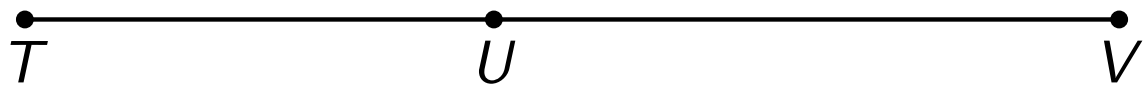
On the diagram mark the congruent line segments with tick marks.



4) Applying the segment addition postulate

Given $\overline{TUV}$, $TU = 8.6$, and $TV = 20.2$. Find UV.

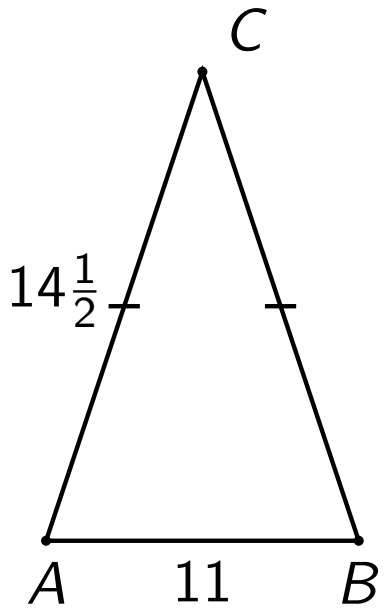
Show your work by marking the diagram and writing an equation.



5) Applying the segment addition postulate

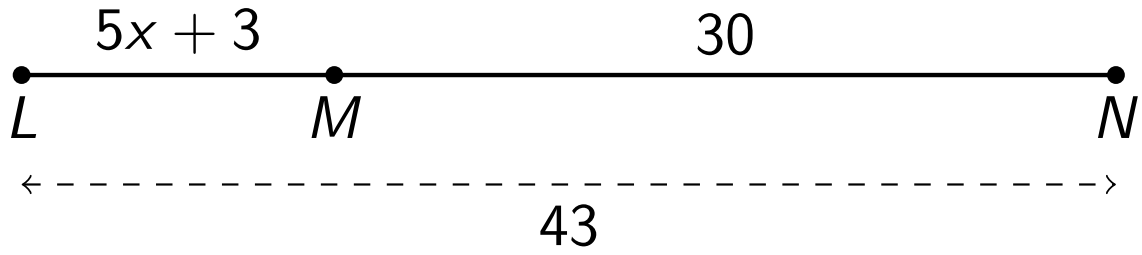
Find the perimeter of the isosceles $\triangle ABC$, given $\overline{AC} \cong \overline{BC}$, $AB = 11$, and $AC = 14\frac{1}{2}$

Show your work with an equation for full credit.



6) Applying the segment addition postulate

Given $\overline{LMN}$, $LM = 5x + 3$, $MN = 30$, $LN = 43$. Find x.



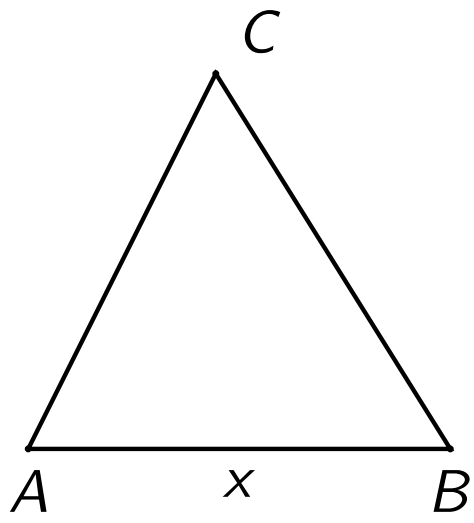
1. Write down an equation to represent the situation.

2. Solve for x.

3. Check your answer.

7) Applying the segment addition postulate

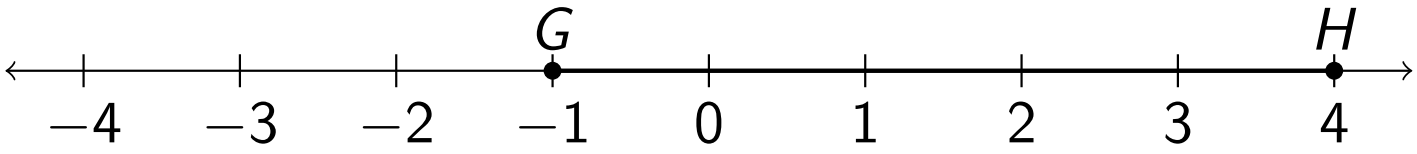
Given equilateral $\triangle ABC$ having perimeter of 40. Find the length of side $\overline{AB}$, x.



8) Finding lengths on the number line

Given $G(-1)$ and $H(4)$, as shown on the number line.

Find the length of the line segment $\overline{GH}$.



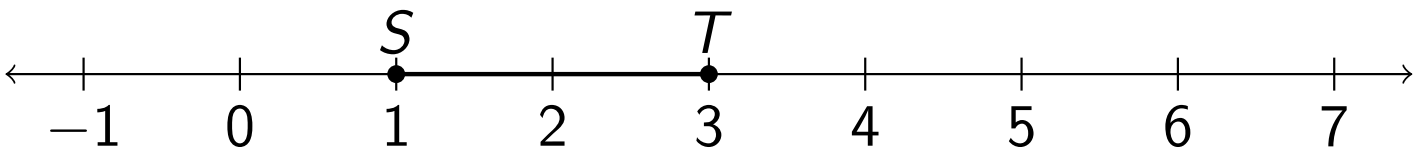
State an equation and the solution.

Check your work by counting the distance. Leave marks to show your work.

9) Finding lengths on the number line (spicy)

Given $S(1)$ and $T(3)$, as shown on the number line.

Find point U given that point T bisects $\overline{SU}$. Plot and label U on the number line.



10) Applying the segment addition postulate

Given M is the midpoint of $\overline{AB}$, $AM = 2x + 5$, $MB = 13$.

1. Mark the diagram with the values and tick marks
2. Write an equation and solve for x
3. Check your result

12) Applying the segment addition postulate

The points Q and R trisect the line segment $\overline{PS}$. $PS = 13\frac{1}{2}$.

1. Mark and label the approximate locations of Q and R.
2. Find PQ. State an equation for full credit.