

Mathematics Class Slides

Bronx Early College Academy

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7-15 October 2020

1.8 Review vocabulary and segment calculations, 7 October

GQ: How do we measure line segments?

CCSS: HSG.CO.A.1 Know precise geometric definitions

1.8 Wednesday 7 Oct

Do Now: Self-assessments questions

1. How do we work efficiently and become a good scholar
2. What should we know and be able to do

Lesson: Circle definition, trisection

Review and practice of vocabulary, line segments, and congruence

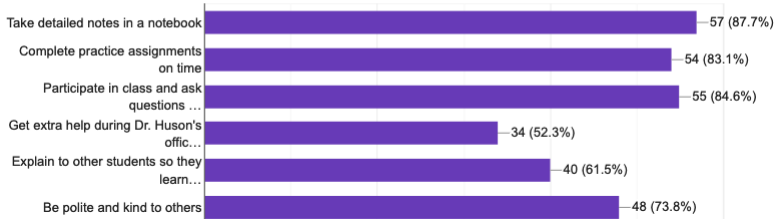
Scholarship assessment

1: Well below, 2: Approaching, 3: Meets expectations, 4: Exceeds

1) How can you demonstrate that you are a good student? What practices contribute to learning? ("Scholarship")



65 responses



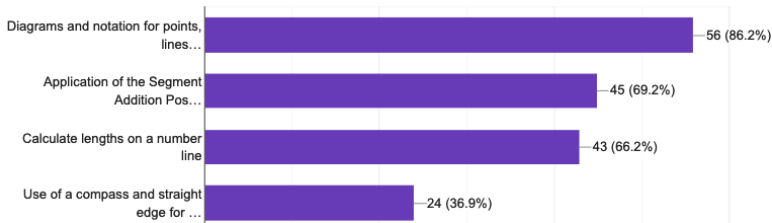
1. Participate: Attendance (Google Classroom), Classkick
2. Practice assignments: Khan Academy, Deltamath, 1.5 worksheet
3. Detailed notes: Notebook treasure hunt uploads (weekend)

What do I know, what can I do assessment

1: Well below, 2: Approaching, 3: Meets expectations, 4: Exceeds

2) How can you demonstrate your geometry knowledge and skills? What have we learned so far?

65 responses

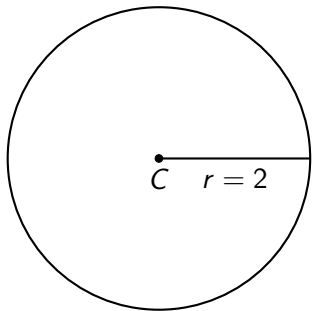


1. Classkick (open book, timed; use @beca324.org login):
Diagrams & notation, segment addition, number line lengths
2. Project: Construction of an equilateral triangle

Definition of a circle in a plane

A circle is defined by its center point and radius r as all the points with distance r to the center.

Shown below circle C , radius $= 2$

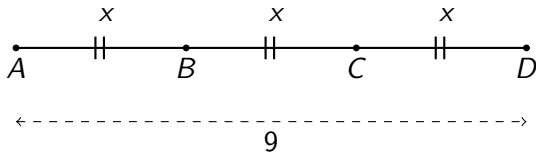


Note: All of the radii of a circle are congruent.

Definition: Trisection of a line segment

Two points *trisection* a line segment if they divide it into three congruent segments

Given \overline{ABCD} with trisecting points B and C . If $AD = 9$, find x .



1) Diagrams and notation

Given the points P and Q , draw \overleftrightarrow{PQ} .

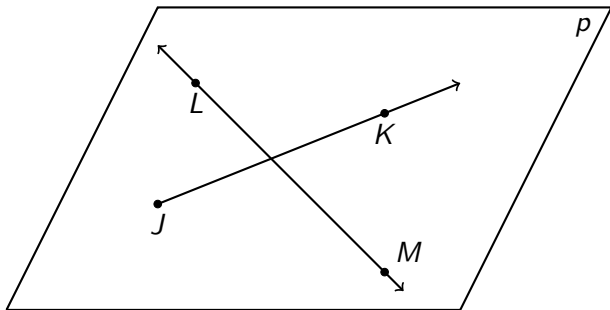
\bullet
 P

\bullet
 Q

2) Diagrams and notation

Write your answers using proper notation

1. What is the name of the ray shown in plane p
2. Mark the intersection of \overrightarrow{JK} and \overleftrightarrow{LM} on the diagram and label it N .



3) Diagrams and notation

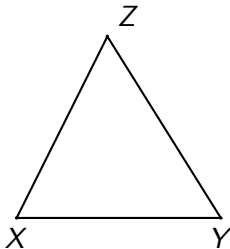
Sketch a circle centered at point A with radius AB .



4) Diagrams and notation

Given isosceles $\triangle XYZ$ with $\overline{XY} \cong \overline{XZ}$.

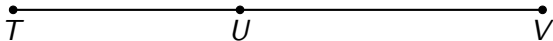
On the diagram mark the congruent line segments with tick marks.



5) Applying the segment addition postulate

Given \overline{TUV} , $TU = 4.7$, and $UV = 6.2$. Find TV .

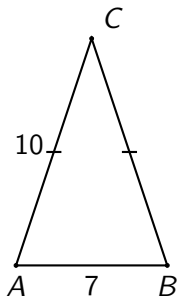
Show your work by marking the diagram and writing an equation.



6) Applying the segment addition postulate

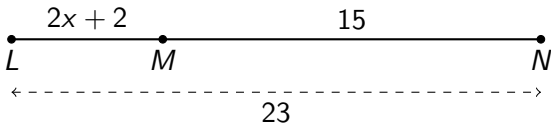
Find the perimeter of the isosceles $\triangle ABC$, given $\overline{AC} \cong \overline{BC}$, $AB = 7$, and $AC = 10$

Show your work with an equation for full credit.



7) Applying the segment addition postulate

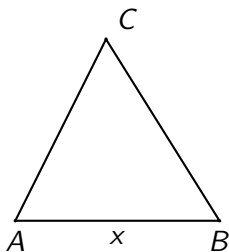
Given \overline{LMN} , $LM = 2x + 2$, $MN = 15$, $LN = 23$. Find x .



1. Write down an equation to represent the situation.
2. Solve for x .
3. Check your answer.

8) Applying the segment addition postulate

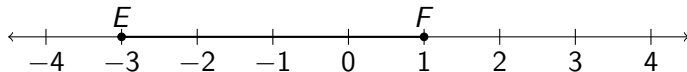
Given equilateral $\triangle ABC$ having perimeter of 21. Find the length of side \overline{AB} , x .



9) Finding lengths on the number line

Given $E(-3)$ and $F(1)$, as shown on the number line.

Find the length of the line segment \overline{EF} .



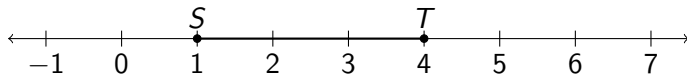
State an equation and the solution.

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

10) Finding lengths on the number line (spicy)

Given $S(1)$ and $T(4)$, as shown on the number line.

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



11) Applying the segment addition postulate

Given M is the midpoint of \overline{AB} , $AM = 3x + 6$, $MB = 15$.

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.

