Mathematics Class Slides

Bronx Early College Academy

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18 October 2021

3.2 Area and volume formulas, 19 October

3.3 Transversals problems, 20 October

3.4 Transversals and review , 21 October

414 Seating chart 10.1

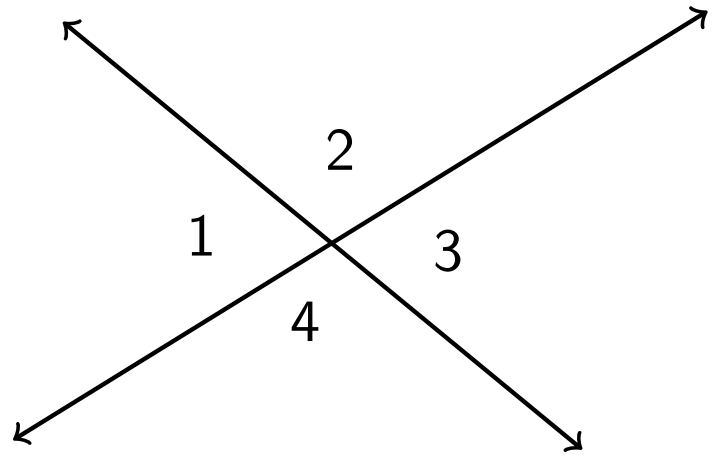
420 Seating chart 10.3

Learning Target: I can name parallel lines transversal angles

HSG.CO.C.9 Prove theorems about lines and angles 3.2 Tuesday 19 October

Do Now: Identify the true statements

1. $\angle 1 \cong \angle 2$
2. $\angle 2 \cong \angle 4$
3. $m\angle 1 + m\angle 4 = 180°$
4. $m\angle 2 + m\angle 3 = 90°$



Lesson: Parallel lines and transversal angles

Homework: Deltamath 3.2; Test corrections due Friday

Angle relationships

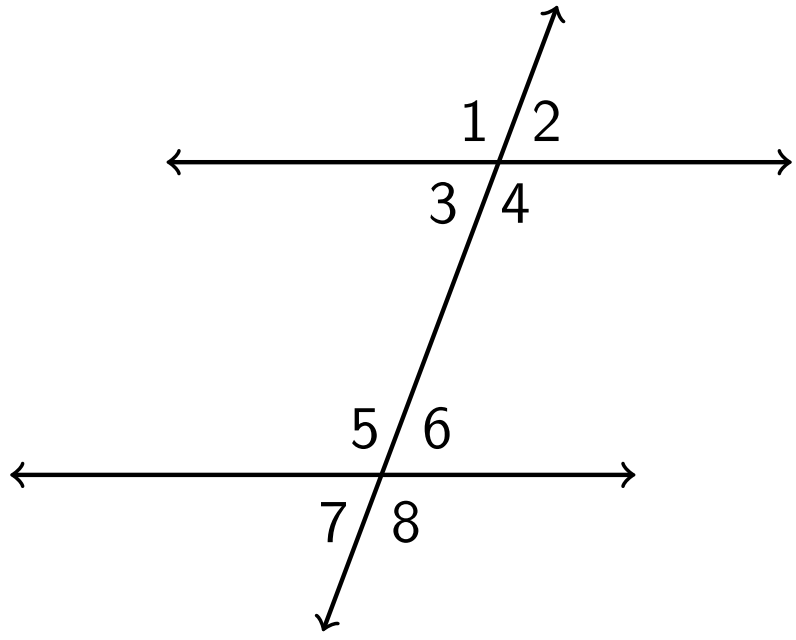
Review: Angle postulates and theorems you have learned.

1. $\perp$ lines and complementary $\angle$s make 90°
2. linear pairs add to 180°
3. vertical $\angle$s are $\cong$
4. definition of an angle bisector

New terminology for parallel lines

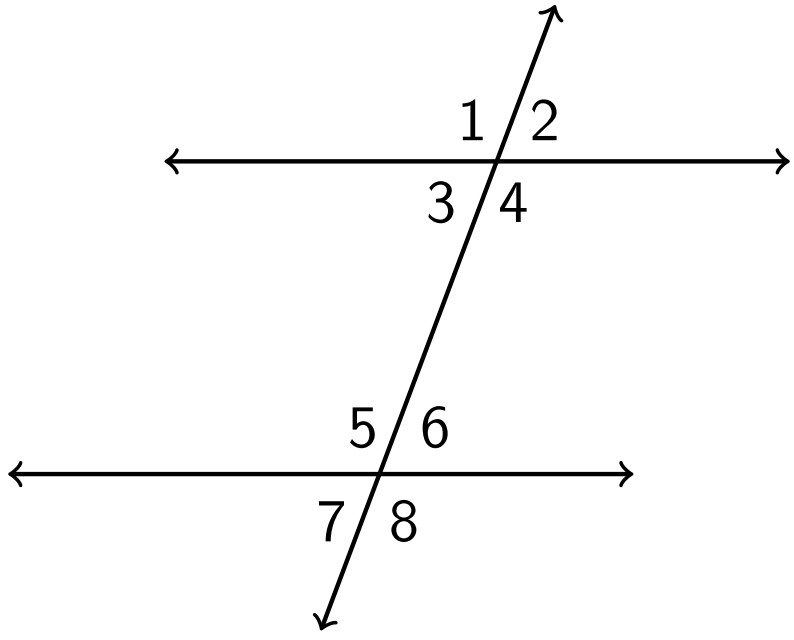
Parallel lines are in the same plane and never intersect

1. *parallel lines*, symbol: $\parallel$ tick marks
2. *transversal line*
3. *interior, exterior* $\angle$s
4. *same-side, alternate* $\angle$s



New theorems for parallel lines

1. *corresponding* $\angle$s of $\parallel$ lines are $\cong$
   $\angle 2 \cong \angle 6$
2. *same-side interior* $\angle$s are supplementary
   $m\angle 3 + m\angle 5 = 180$
3. *alternate exterior* $\angle$s are $\cong$
   $\angle 2 \cong \angle 7$



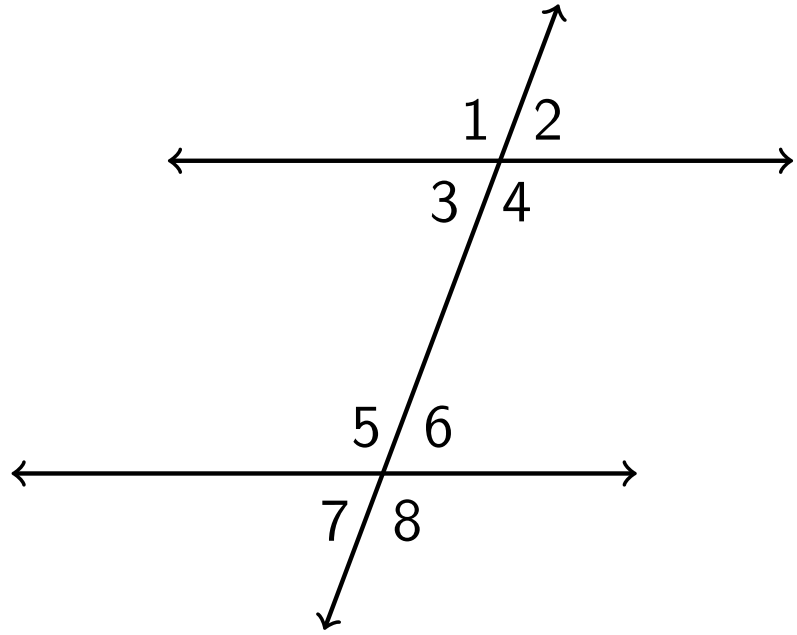
Hint: There are only two angle measures, the acute angles and the obtuse angles
(and they add to 180°)

Learning Target: I can calculate transversal angles

HSG.CO.C.9 Prove theorems about lines and angles 3.3 Wednesday 20 October

Do Now: Identify each angle

1. Opposite $\angle 4$
2. Corresponding to $\angle 3$
3. Alternate exterior to $\angle 8$
4. Same side interior to $\angle 5$
5. Alternate interior to $\angle 4$



Lesson: Parallel lines with transversals, algebra

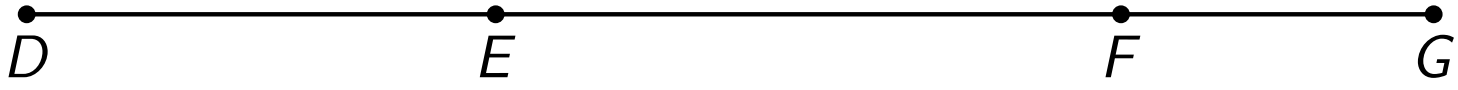
Homework: Deltamath 3.3

Learning Target: I can calculate transversal angles

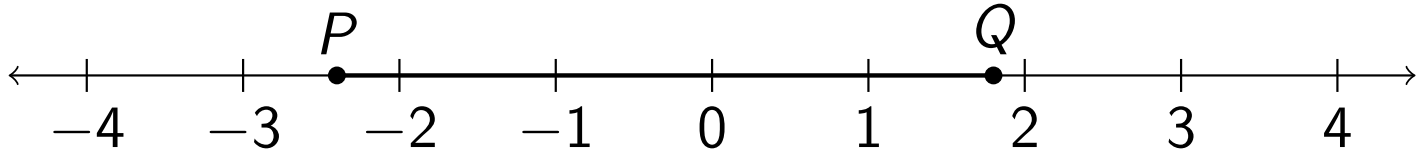
HSG.CO.C.9 Prove theorems about lines and angles 3.4 Thursday 21 October

1. Do Now: Given $\overline{DEFG}$, $DE = 3\frac{1}{4}$, $EF = 6\frac{1}{4}$, and $FG = 1\frac{3}{4}$. (diagram not to scale)

   Find DG, expressed as a fraction, not a decimal.



2. Given $P(-2.4)$ and $Q(1.8)$, as shown on the number line. Find the length of the line segment $\overline{PQ}$.



Lesson: Transversals, review for fractions quiz, notation

Homework: Deltamath 3.4 (spicy)

Notebook credit

Mastery grades 1 to 4

Take organized notes and study them for the test Friday

1. Well below: Few notes or no notebook
2. Approaching expectations: Many pages of notes in a composition book. Missing several formulas and definitions.
3. Proficient: Well organized composition book with most or all formulas and terminology easy to locate.
4. Extending: Assesses peers and gives constructive feedback.

Notebook leaders:
10.1 Jada, Abigail, Aiden, Nathaliah
10.2 Jakia, Favour, Khudija
10.3 Flora, Jefferson, Catalina

Casio fx-9750GII calculator - due Friday 1 October

In the high school at BECA we use the Casio fx-9750GII.

It is allowed on the Regents exams, SAT tests, and International Baccalaureate exams.

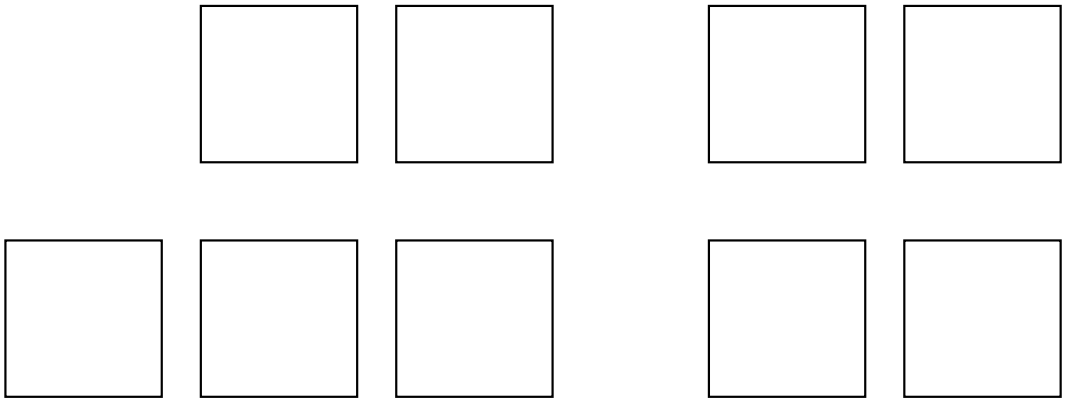
You may use a different calculator in Geometry if you prefer, but I recommend buying the Casio fx-9750GII.

(see me if buying a calculator is a hardship for your family)

Open Middle problem (fun)

Use digits from 0 to 9. Using a digit no more than once.

The first two angle measures are complementary. The second two angles supplementary. (degrees)



414 Seating chart 10.1

Front of room Video Screen

Steven L.	Sadia Z.	Aiden P.	Isaias A.	Muhamed K	Alex R
Nathaliah P	Alexis N.	Ebrima G	Jonathan R	Jada C.	Ebenezer W
Jeremy D.	Angel M.	Edwin S.	Abigail M.	Robert C.	Justin R
Andrew U.	Ivana T	Emmanuel W	Juan R.	Tyler S.	Andrian A.
Jose M	Roberto V	Joshua S	Yuliana G		
Annette M	Oprah M Jason R	Christian V	Jose L		

420 Seating chart 10.3

Room 420 10.3 Front (screen)

		5	Yostin F	1	Lessly A
	Chasidy S	Jefferson M	Jada M	Flora A	Taniah G
Jonathan S	Matphew S				
8	Ashley R	6	Zinaira D	2	Catalina M
Leslie	Lisbeth E	Yaeli M	Fariha S	Aminata B	Kelvin A
9	Richard A	7	Christopher S	3	Xiomara A
Ashley O	Cristhian A	Maryelis T	Jarryw B	Juan P	Manny B
Back door		10	Oprah M	4	
		Jason R	Annette M	David A	Anaylis O

Quiz learning targets

7.G.B.6 Solve problems involving area, volume and surface area

Four mastery standards

- Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation. (7.EE.B.3)