Mathematics Class Slides Bronx Early College Academy

Chris Huson

24 February 2020

- 9.1 Triangle congruence theorems, Monday 24 February
- 9.2 Exam review, Gradescope intro; Tuesday 25 February
- $9.3 \ Triangle \ congruence \ theorems, \ Wednesday \ 26 \ February$
- 9.4 Triangle congruence proofs, Thursday 27 February
- 9.5 Proof Proof intro on Deltamath (laptops), Friday 28 February
- 9.6 Dilation and similarity review, Monday 2 March
- 9.7 Dilation and similarity review, Tuesday 3 March
- $9.8\ \mathsf{Dilation}$ and similarity review, Wednesday $5\ \mathsf{March}$

GQ: How do we prove two triangles are congruent?

CCSS: HSG.CO.B6-8 Understand congruence in terms of rigid motions 9.1 Monday 24 February

Do Now: Transformations

- Rigid motions: translation, reflection, rotation
- Corresponding angles and lengths
- Symmetry in terms of transformations "onto" itself
- Using the properties of rigid motions in explanations

Lesson: Side-side-side Triangle congruence postulate Corresponding parts of congruent triangles are congruent

Homework: Transformations practice handout

GQ: How do we learn from exam results using Gradescope? CCSS: HSG.CO.B6-8 Understand congruence in terms of rigid motions 9.2 Tuesday 25 February

Do Now: Algebra mastery practice on Deltamath

- Circle equations (use Casio calculator)
- Linear equations of parallel & perpendicular lines

Lesson: Setting up and using Gradescope exam scoring system Test corrections

Homework: Complete DoNow Deltamath problems (due 10PM); Test corrections due Friday 10PM

GQ: How do we prove two triangles are congruent?

CCSS: HSG.CO.B6-8 Understand congruence in terms of rigid motions 9.3 Wednesday 26 February

Do Now: Rigid motions, translation, reflection, rotation

- ► Triangle congruence theorem applications
- Compositions of transformations
- Justifying congruence based on rigid motion

Lesson: Side-side-angle ambiguous case Corresponding parts of congruent triangles are congruent

Homework: Transformations practice handout

GQ: How do we prove two triangles are congruent?

CCSS: HSG.CO.B6-8 Understand congruence in terms of rigid motions 9.4 Thursday 27 February

Do Now: Transformations

- Reflection over a line not an axis
- Rotation
- Symmetry in terms of transformations "onto" itself
- Using the properties of rigid motions in explanations

Lesson: Proving triangles congruent, two column format

Homework: Deltamath triangle congruence practice

GQ: How do we prove two triangles are congruent?

CCSS: HSG.CO.B6-8 Understand congruence in terms of rigid motions 9.5 Friday 28 February

Do Now: Transformations

- Rigid motions: translation, reflection, rotation
- Corresponding angles and lengths
- Symmetry in terms of transformations "onto" itself
- Using the properties of rigid motions in explanations

Extra credit: Practicing proof with Deltamath (laptops) 10.2 Circle equations, Casio use

Homework: Transformations practice handout

GQ: How do we calculate dilation ratios?

CCSS: HSG.CO.B6-8 Understand congruence in terms of rigid motions 9.6 Monday 2

March

Do Now: Similarity transformations

- ▶ Dilation scale factor *k*
- Dilating segments and their properties
- Similarity ratio situations

Lesson: Review congruence homework problem set

Homework: Complete dilation and similarity problem set

GQ: How do we calculate dilation ratios?

CCSS: HSG.CO.B6-8 Understand congruence in terms of rigid motions 9.7 Tuesday 3 March

Do Now: Similarity transformations

- Similarity ratio situations
- ► Intersecting chords, product format
- ► Sample triangle congruence proofs

Lesson: HL congruence theorem; AA & SAS similarity theorems

Classwork: Deltamath comprehensive review

Homework: Complete Deltamath (proof assignment is optional)

GQ: How do we calculate dilation ratios?

CCSS: HSG.CO.B6-8 Understand congruence in terms of rigid motions 9.8 Wednesday 5 March

Do Now: Similarity transformations

- Similarity ratio situations
- Intersecting chords, product format
- Sample triangle congruence proofs

Lesson: Transformation review

Homework: Study for exam tomorrow