10th Grade Geometry - Unit 8: Transformational Geometry

Bronx Early College Academy

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4 March 2019

Laptops - Geogebra class codes

7.10 Geogegra transformations intro. Tuesday 12 February

7.15 Geogegra median partition 2:1 ratio. Tuesday 26 February

8.1 Geogegra - Transformations project Tuesday 6 March

8.2 Dilation and similar triangles. Wednesday 7 March

8.3 Dilation and similar triangles. Thursday 8 March

8.4 Symmetry, "onto" transformations. Monday 11 March

8.5 Geogegra - Transformations project Tuesday 12 March

GQ: How do we model with digital tools?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 7.1 Tuesday 18 January

GeoGebra Geometry App
Enter N7BHK for 10.1 or P9PNZ for 10.2
Set up account using your real name.
Beginner Tutorials with Lesson Ideas
Author: Tim Brzezinski

Homework: Complete Geogebra

GQ: How do we apply translations to functions?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 7.10 Tuesday 12 February

Geogebra project: Create a transformations puzzle problem

1. Start with a polygon
2. Use Geogebra's tranformations tools
3. List the transformation steps you used
4. Rubric: correct, aesthetics, MLA
5. Print out a color pdf to email me. (husonbeca@gmail.com)

Lesson: Geogebra tool pallette

Homework: Practice problems

GQ: How do we use technology to explore geometric relationships?

CCSS: MP5 Use appropriate tools strategically: dynamic geometry software 7.15 Tuesday 26 February

Do Now: Practice analytic geometry skills on handout

Lesson: Geogebra project to measure the division of a median of a triangle by the centroid

1. Start with a triangle, connect two midpoints and medians, intersecting at the centroid
2. Use Geogebra's measurement tools
3. Explain the resulting 2:1 ratio using text and symbols
4. Assessment rubric: correct, aesthetics, MLA
5. Print out a color pdf to email me. (husonbeca@gmail.com)

Homework: Pretest packet due Thursday (test Friday)

GQ: How do we use technology to explore geometric relationships?

CCSS: MP5 Use appropriate tools strategically: dynamic geometry software 8.1 Tuesday 6 March

Lesson: Geogebra project showing various transformations

1. Apply transformations to polygons (show at least two)
2. Use Geogebra's formating tools
3. Label with the transformation's specifics (e.g. center, factor)
4. Rubric: correct, aesthetics, MLA & email standards
5. Export a .png to email me. (husonbeca@gmail.com)
6. Filename: Last-Title.png, email subject line message

Parent conferences this Thursday evening, Friday afternoon

Homework: Test corrections (due tomorrow)

GQ: How do we transform objects on the coordinate plane?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 8.2 Wednesday 7 March

Do Now Plotting transformations review review

1. Handout

Lesson: Translation, reflection, rotation, dilation, composition, properties

Homework: Practice problems handout

GQ: How do we transform objects on the coordinate plane?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 8.3 Thursday 8 March

Do Now Analytic geometry review

1. Point-slope form of linear equations
2. Applications of slope, graphing linear equations
3. The equation of a circle, deriving center and radius

Lesson: Midlines, medians, the centroid. Measuring with Geogebra, submissions standards

Homework: Practice problems handout

GQ: How do we say that objects are mapped "onto" themselves?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 8.4 Monday 11 March

Do Now Analytic geometry practice

1. Point-slope form of linear equations
2. Applications of slope, graphing linear equations
3. The equation of a circle, deriving center and radius

Lesson: SSS Similarity;
Symmetry in terms of tranformations *onto* oneself

Homework: Practice problems handout

GQ: How do we use technology to explore geometric relationships?

CCSS: MP5 Use appropriate tools strategically: dynamic geometry software 8.5 Tuesday 12 March

Lesson: Geogebra project showing various transformations

1. Apply transformations to polygons (show at least two)
2. Use Geogebra's formating tools
3. Label with the transformation's specifics (e.g. center, factor)
4. Rubric: correct, aesthetics, MLA & email standards
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