10th Grade Geometry - Unit 13: Regents Review Bronx Early College Academy

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13.1 Scale & applications of dilation Tuesday 28 May

13.2 Similarity review Wednesday 29 May

13.3 Similarity review Thursday 30 May

13.4 Similarity review Friday 31 May

GQ: How do we use scale factors?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 13.1 Tuesday 28 May

Do Now: Handout

- 1. Using scale factors
- 2. Real world situations

Guest teacher, Mr. Segal. Applications of scale factors in finance.

Homework: Problem set, test corrections due Thursday

GQ: How do we use scale factors?

Triangle similarity: for your notebook

Given

$$\triangle ABC \sim \triangle DEF$$

Equivalently

$$\triangle ABC \rightarrow \triangle DEF$$

Complete the three line segment correspondences, three scale factor ratios, & three dilations.

1.
$$\overline{AB} \rightarrow \overline{DE}$$

1.
$$k = \frac{DE}{AB}$$

1.
$$DE = k \times AB$$

2.
$$\overline{BC} \rightarrow$$

2.
$$k =$$

2.
$$EF = k \times$$

3.
$$\overline{AC} \rightarrow$$

3.
$$k =$$

3.
$$DF = k \times$$

What happens if k = 1?

GQ: How do we use scale factors?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 13.2 Wednesday 29 May

Do Now: Quadrilateral properties

- 1. Given a list of features, identify the applicable quadrilateral
- 2. Early finishers: Triangle congruency proofs

ASA proof of a parallelogram's congruent triangles, implications Pretest packet: volume, trig, analytic geometry

GQ: How do we use scale factors?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 13.3 Thursday 30 May

Do Now: Quadrilateral properties

- 1. Given a list of features, identify the applicable quadrilateral
- 2. Early finishers: Triangle congruency proofs

Notebook check: trapezoid area (10.1) Review for test

Homework: Study for exam tomorrow

GQ: How do we use scale factors?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 13.4 Friday 31 May

Do Now handout: Volume, density, & trig problems Classwork review

Assessment: Exam

- 1. Sector areas and arc lengths; compound areas
- 2. Volume formulas, compound shapes, density problems
- 3. Unit conversions, rounding
- 4. Trigonometric situations
- 5. Solving for a missing input given a formula result

Quadrilateral packet project grade

Homework: packet