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 Constructions Thursday 30 May
- 13.4 Constructions, Similarity quiz Friday 31 May
- 13.5 Angles review Wednesday 5 June
- 13.6 Similarity review Friday 7 June

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.
$$\overline{AB} \to \overline{DE}$$

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: Similarity transformation

- 1. List what segments map to what segments
- 2. Find k as a ratio, apply it to each length.

Binder check

Classical constructions using compass & straightedge

Homework: Problem set

GQ: How do we use scale factors?

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

Do Now handout: Constructions, dilation problems

Classwork review

Assessment: Exit quiz (& Binder check)

- 1. Angle bisector, perpendiculars constructions
- 2. Dilation situations
- 3. Similarity proof situations

Homework: Review packet;

Quiz corrections due Wednesday (pick up Monday)

Monday Regents review after History exam, Melrose Library

GQ: How do we calculate the measure of angles?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 13.5 Wednesday 5 June

Do Now: Quadrilateral properties

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

Assessment: Exit quiz covering angle measure situations Review packet: Triangles, parallels, circles, intersections

GQ: How do we calculate the measure of angles?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 13.6 Friday 7 June

Do Now: Quadrilateral properties

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

Assessment: Exit quiz covering angle measure situations

Review packet: Analytic geometry