10th Grade Geometry - Unit 10 Area & Volume

Bronx Early College Academy

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15 April 2019

10.1 Solids and Their Cross Sections Monday 15 April

10.2 Geogebra - Area Situations in Sports Tuesday 16 April

10.3 Review for exam Wednesday 17 April

10.4 Exam Thursday 18 April

10.5 Dilation+similarity review Monday 29 April

10.6 Deltamath Volume Practice Tuesday 30 April

10.7 Density, trig review Friday 3 May

10.8 Density, trig review Monday 6 May

GQ: How do we slice 3-dimensional obects?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 10.1 Monday 15 April

Do Now: Solids handout

1. Review the handout
2. Open your notebook to Friday's lesson
3. Write from memory the formulas for a circle's circumfernce and area

Lesson: Solids and cross sections of 3-dimensional figures
Homework: Practice problems handout

GQ: How do we measure the areas of competitive sports?

CCSS: MP5 Use appropriate tools strategically: dynamic geometry software 10.2 Tuesday 16 April

Project: Quantify the area of a playing field of your choice

1. Write a paper illustrating the area of part of a playing field.
2. Spicy: Use color & line variations for clarity (not decoration)
3. Construct in Geogebra, compile in Word: add heading & title, text, and formulas using Microsoft's equation editor
4. Email me: Last-Title.pdf, with subject line & message
5. Rubric: correct, aesthetics, MLA & email standards

Homework: Complete project (due by 10:00 pm)

GQ: How do we slice 3-dimensional obects?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 10.3 Wednesday 17 April

Do Now: Review Exercises p. 189

1. Review for exam

Lesson: Test review, areas, volumes, density; cumulative review

Homework: Study for exam tomorrow

GQ: How do we slice 3-dimensional obects?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 10.4 Thursday 18 April

Lesson: Test

Homework: Vacation packet

GQ: How do we use similarity to calculate triangle lengths?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 10.5 Monday 29 April

Do Now: Similar triangles problem

1. Use dilation approach to solve for x and y
2. Alternate method: trig $\cos\theta$

Lesson: Review exam results

Homework: Test corrections

GQ: How do we model 3-dimensional obects?

CCSS: HSG.CO.D.12 Congruence, geometric constructions 10.6 Tuesday 30 April

Lesson: Deltamath practice

Homework: Complete Deltamath assignment (due Thursday 10pm)

GQ: How do we model 3-dimensional obects?

CCSS: HSG.GMD.A.3 Use volume formulas to solve problems 10.7 Friday 3 May

Do Now: Volume warmup with trig ratio review

1. Using the formula sheet & calculators
2. Rounding practice
3. Simple trigonometry situations: $\sin, \cos, \tan \theta$

Lesson: Volume with density problems

Homework: Handout packet mixed volume & trig review

GQ: How do we model 3-dimensional obects?

CCSS: HSG.GMD.A.3 Use volume formulas to solve problems 10.8 Monday 6 May

Do Now: Volume warmup with trig ratio review

1. Using the formula sheet & calculators
2. Rounding practice
3. Simple trigonometry situations: $\sin, \cos, \tan \theta$

Lesson: Volume with density problems

Homework: Handout packet mixed volume & trig review