Unit Map 2012-2013

Monroe #2 - Orleans BOCES (Regional Collaboration)

Collaboration / Math 8* / Grade 8 (Math Regional Curriculum)

Wednesday, October 31, 2012, 2:14PM

Standard/Module: Proficiency with Geometry: 8.G.8 (Week 32, 8 Weeks)

Stage 1: Desired Results

Standards Focus

- Major (70%) 8.EE.2
  8.NS.1
  8.NS.2

Grade 8 Map

Standards

NYS: CCLS:Mathematics, NYS: 8th Grade , Geometry

8.G Understand and apply the Pythagorean Theorem.

- 8. Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

Enduring Understandings	Essential Questions
Distance between two points	1. How do you use the Pythagorean Theorem to find the distance between two points? 2. How do you use the distance formula to find the distance between two points?

Critical Content

Distance between two points

- Using Pythagorean Theorem
- Using distance formula

Skills	Vocabulary
1. Calculate the distance between two points in a coordinate system using Pythagorean Theorem. 2. Connect findings to the distance formula to find the distance between two points on the coordinate plane.	Tier 2: calculate, coordinate plane, leg, hypotenuse, Pythagorean Theorem, right triangle Tier 3: distance formula, perpendicular

Stage 2: Assessment Evidence

Assessments

Determine the distance using Pythagorean Theorem
Formative: Test: Written

Students are given two points and asked to plot them on a coordinate plan and determine the distance using the Pythagorean Theorem. Students are expected to justify their answers.

Stage 3: Learning Plan

Learning Activities	Resources
Students graph three equations on a coordinate plane in which one is vertical, one is horizontal, and one is a linear equation and find the distance between two specified points. For example, graph x = 4, y = 2, and y =2x+2 on the same coordinate plane Shade in the resulting right triangle. Find the distance between (0,2) and (4, 10). Students write three equations for another group to graph and solve for a specified point on the graph. Students are given two points on the graph and they draw in the right triangle, and find the distance between the vertices that are on opposite ends of the hypotenuse. Students write the equations for the legs and hypotenuse.	www.illustrativemathematics.org www.illuminations.nctm.org

Differentiation Opportunities

Eliminate writing the equations if this is too overwhelming for students.

<< Previous Year

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