Subject Math Topic: Pythagorean Theorem

Grade Level 8Th Time: 90 Minutes Day: One

1. Instructional Goals
   1. The Students will understand:
      1. The basic components of the Pythagorean Theorem
2. Performance Objectives
   1. The students will:
      1. Be able to label the parts of a right triangle in order to use the Pythagorean Theorem to solve.
3. Standards
   1. 22.) Explain the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.
4. Teaching/Learning Procedures

Time Activity

25 minutes

* + 1. Motivational/Instructional- The students will enter the class room and there will be a picture of a baseball field posted on the Elmo. The students are to write down 2-3 sentences about what that picture represents to them. (1R) Once everyone has completed their sentences then the class as a whole will discuss what the picture represents. I will then lead the class in a discussion about what the layout of a baseball field looks like. (1L)

50 minutes

* + 1. Teaching/ Learning- Once we can a firm understanding of the layout of a baseball field I will then take my students outside to the school’s baseball field. Once we are out on the field I will make my students choose sides and spread out as if they were really playing a game. I will set the game up so that there will be a runner on 3rd base running home. I will then as the question, “if the second baseman wanted to throw the player on 3rd out at home how far must he throw the ball?” I will give the students time to think about the responses and we will discuss other people’s answers. (2R) Then while out on the field I will show them how home to 1st, 1st to 2nd, and 2nd to home makes a right triangle. We will then go back to the classroom and discuss right triangles and their properties. A brief introduction to the Pythagorean Theorem and how to solve the ball field problem. (2L)

15 Minutes

* + 1. Closure: We will wrap up the lesson by discussing other right triangles in real world examples.

1. Materials/Media : Elmo, projector, white board
2. Accommodations/Modifications:
   1. The picture of the ball field will be posted so that every student can see.
   2. IEP Modifications
3. Assignments: for homework the students are to find at least 5 examples of a right triangle in real world examples.
4. Assessments
   1. Informal: I will conduct an informal assessment on the student’s responses to questions I ask.
   2. Formal: There will be no formal assessment today.
5. Professional Reflection