Lesson 3 Part (A)

❖ **Topic:** A culmination of trigonometric identities. Verifying complex identities.

❖ **Standards:**
* 4.3 (d) Patterns and Algebra – All students will represent and analyze relationships among variable quantities and solve problems involving patterns, functions, and algebraic concepts and processes.
* 4.5 (d) Mathematical Processes – All students will use mathematical processes of problem solving, communication, connections, reasoning, representations, and technology to solve problems and communicate mathematical ideas.

❖ **Objectives:**
* Students will be able to verify complex trigonometric identities.
* Students will be able to determine the appropriate method(s) to determine whether an equation is a trigonometric identity.
* Students will be able to use substitution of basic trigonometric identities to simplify more complicated equations.

❖ **Materials:**
* Magic Square worksheet
* Verifying Trigonometric Identities worksheet (homework)

❖ **Motivation:**
* At the start of the period students will write any homework questions they had on the board and other students will explain/write their solutions. If no students volunteer the teacher will answer the questions.

❖ **Procedure:**
* Each student will be given a Magic Square worksheet. Students will have the whole period to work on the worksheet.

❖ **Closure:**
* In the last 15 minutes of class students will get into pairs and check their solutions to the Magic Square.

❖ **Homework:**
* Verifying Trigonometric Identities worksheet