



Math game

– *Pythagorean Theorem*



Educational Goals

- ❖ Work on spatial sense
- ❖ Analyze situations that use geometrical figures

Key Features of the Targeted Competencies

- ❖ To apply different strategies in order to elaborate the solution (C1)
- ❖ To elaborate a solution (C1)
- ❖ To validate the solution (C1)
- ❖ To form conjectures (C2)
- ❖ To build and exploit networks of mathematical concepts and processes (C2)

Concepts Used

- ❖ Pythagorean theorem
- ❖ Arithmetic (multiplication, division, square root, exponent)

Materials

- ❖ Game board
- ❖ Question cards
- ❖ Pawns
- ❖ Pencils
- ❖ Sheets of paper
- ❖ Answers document

Targeted Academic Level



Targeted Competencies



Mathematical Fields Concerned



Suggested Teaching Formula



Time Required
30 minutes



Suggested Process



Step 1: Introduction (5 minutes)

Take a poll with the students. Ask them what their favourite board game is. Present the Pythagorean theorem game to the students (game board, cards, dice, etc.).

Step 2: The challenge (20 minutes)

Place the students in teams of two. Explain the rules to the students (refer to the rules on the game board).

Allow the students to play in teams for 20 minutes. If the students encounter difficulties, review the Pythagorean theorem. Remind the students that they have to write down their calculations.

Step 3: Review (5 minutes)

Take a poll to know if the students liked the game. Ask them what they found more difficult. Review with the whole class the cards with a “?” that were more difficult and explain the solution.