

Triple Concentration

Object: to form Pythagorean triples, which are sets of three whole numbers a , b , and c , such that $a^2 + b^2 = c^2$

Materials needed: a set of *Triple Concentration* playing cards for each group

Number of players: 2–4

Teacher Preparation

Print out and copy one set of *Triple Concentration* playing cards for each group of 2–4 students. If the printed side is visible through the back, glue a piece of colored paper to the back of the cards before cutting them out.

Game Play

• **Playing the game**

Arrange the cards face down in rows. Each player turns one card over, and then replaces it. The player with the highest card goes first. The players then take turns, going clockwise.

Player 1 turns over any 3 cards. If the numbers on the cards form a Pythagorean triple, player 1 keeps them and takes another turn. If the cards do not form a Pythagorean triple, they are replaced in their original positions.

• **Winning the game**

Continue playing until all of the cards are removed from the table or no Pythagorean triples remain. The player with the most cards at the end of the game wins.

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