



**2013
INDIO ROTARY CLUB
19th Annual
MIDDLE SCHOOL MATH FIELD DAY
Fact Sheet**



Date of Event:	Saturday May 4 th , 2013, 8:00 AM until 2:00 PM
Year Started:	1995 and held annually ever since.
Founded By:	Rotary Club President John Benoit (now a Riverside County Supervisor).
Organizer/Producer:	Indio Rotary Club, P.O. Box 412, Indio, CA 92202-412 email: IndioRotary@gmail.com web: www.indiorotary.org , Facebook: www.facebook.com/IndioRotary Contact: Martha Mendez (760) 347-3157
Sponsors:	John Glenn Middle School and DSUSD provide the facility. Indio Youth Task Force, Riverside County Supervisor John Benoit, Armtec Defense Products, Coachella Valley Rotary, Indio Sunrise Rotary, Coachella East Rotary, La Quinta Rotary, Altura Credit Union. <i>(final list of sponsors not finished yet)</i>
Participants:	All Coachella Valley middle schools (6th, 7th and 8th grades) are invited to participate. Each school selects its own team as it chooses. Each team must be accompanied by a faculty advisor.
Students From:	Coachella Valley Unified School District, Desert Sands Unified School District, Palm Springs Unified School District and private schools.
2012 Participating Schools:	Palm Desert Charter, James Workman School, Toro Canyon, Desert Ridge Academy, John Glenn, Cahuilla Desert Academy, Marywood Palm Valley, Nellie Coffman, Mecca Elementary School, Jefferson Middle, Our Lady of Perpetual Help. <i>(final list of participating schools not complete yet)</i>
Number of Participants:	Approximately 400 students. A school team consists of ten (10) students per grade level.
Food:	Breakfast items and lunch are served and water provided.
Location of the Event:	John Glenn Middle School, 79-655 Miles Ave, Indio

Event's Goals:

1. The day is designed to stimulate interest in mathematics amongst Coachella Valley middle school students.
2. Participation in the competition allows them to demonstrate their knowledge of mathematics.
3. The day provides an opportunity to recognize and celebrate students' math ability and achievements.
4. It rewards both the students who excel in math and recognizes the schools with the most wins.

Event's Objective:

The event is to encourage students to study and enjoy math. Indio Rotary, along with the three (3) Valley school districts and private schools, want to motivate students to develop and apply their math skills. Math Field Day challenges students to use their math knowledge and wit to solve problems. As a reward for their participation and effort they win prizes and recognition for themselves and their school. It's not just math formulas, students also play three-dimensional tic-tac-toe or compete in "construction derby" where materials may include straws and paper clips as the materials to build a bridge or a tower. The students prepare months in advance for the event by studying after school with their teacher and team members. Several schools have formed on campus math clubs in response to Math Field Day. Also, a custom has developed where the students proudly wear school team shirts made just for their participation in the event.

Event's History:

Indio Rotary started this event 19 years ago when the Club President at the time, John Benoit, pointed out many Coachella Valley middle school students could not participate in the Riverside Math Field Day because of transportation and travel issues. Indio Rotary organized this event to provide Coachella Valley students the chance to participate in such a competition of their own. The event has grown steadily over the years. The awards assembly at the end of the event, held in the school auditorium, is usually full to capacity, with many parents who also come for the ceremony. The event was highlighted in an article in the December 2000 *Rotarian Magazine* which has a monthly worldwide circulation of 500,000.



Competitions:

Students compete by grade levels in individual and team competitions. It includes the elements of a balanced mathematics program such as computational and procedural skill, conceptual understanding and problem solving. Questions are written to the California Content Standards allowing students to get ready for Math Field Day while also preparing for the California Standards test at the same time. There are volunteers in each room at each competition that proctor each event or game. Sometimes in the scoring and totaling of the results it is found there are some tie scores. The first testing of the day is used if there is a need for tie breaking to determine the winner.

Events include:

- Leapfrog** requires two students to work as partners to solve challenging mathematical problems. A set of questions is provided and the team members decide how to organize their time and effort. They may communicate quietly and check each other's work.
- Calculator Challenge** – using a calculator they work various problems such as finding the area of a triangle with an altitude 17.2cm and a base of 8.5cm
- Mental Gymnastics** without the use of a calculator it requires calculating and solving problems involving addition, subtraction, multiplication, and division. For example, solve the problem: $10+9+8+7+6+5+5+6+7+8+9 =$
- Team Investigation** a collection of worthwhile problem-solving tasks.
- Construction Derby** - Students work cooperatively to construct an object within a specified amount of time. The object is measured, tested, or compared by the proctor. The materials used can be straws, dry spaghetti, marshmallows and rubber bands.

Games include:

- Hex** helps students develop the idea of finding patterns in a maze. Winners must form a continuous path from their side to the opposite side of the rhombus by connecting the hexagons on their edges.
- 5 in a Row** is similar to two (2) dimensional tic-tac-toe. It is played on graph paper. Players alternately mark "X" and "O" in the squares. The first player to get five-in-a-row horizontally, vertically, or diagonally wins.
- 24** is a mental math game where students use, arithmetic and other means to arrive at 24.
- 3D Tic-Tac-Toe** the object of the game is to complete a straight line in any dimension (vertical, horizontal or diagonal).
- Capture** is a simple paper/pencil game played on a grid. The players use logic and the rules to corner or capture their opponent.

$$\text{Smiley}^{-1} = \text{Frowny}$$

Inverse

$$\text{Smiley}^2 = \text{Smiley}$$

Square

$$\text{Smiley}^3 = \text{Cube}$$

Cube

$$\sin(\text{Smiley}) = \text{Road}$$

(Sign)

$$\sqrt{\text{Smiley}} = \text{Smiley}$$

Root

Awards:

The awards ceremony has become an annual highlight noted for its boisterous and competitive cheering and applause, as team and individual mathematics skills are recognized. Every participating student receives a *Certificate of Participation*. **Event** winners earn first place trophies and a \$20 cash card. Second and third place winners earn a ribbon. **Game** winners earn first place trophies and a \$20 cash card. Second place wins a ribbon. Schools with the most wins, in each grade level, earn a perpetual trophy. Their name is added to the trophy and they keep it until next year's event. A **Top Mathematician** is selected for each grade level and they receive \$100 dollars.

Previous Winners and Event Photos:

See separate lists and sheets for each year.

Where are they now?

Some previous Math Field Day participants include:

Chris Escobedo, City of La Quinta assistant to the city manager;
Manual Valladolid, teacher CV Unified; Silvia Paz, senior field rep for Assemblyman Manuel Pérez.



Event Schedule:

Schedule for the Day:			Events	Games
8:00 AM – 8:30 AM	½ Hour	Registration	- Leap Frog	-Hex
8:30 AM – 9:00 AM	½ Hour	Student Testing	-Calculator Challenge	-5 in a Row
9:00 AM – 9:15 AM	¼ Hour	Break	-Mental Gymnastics	-24 (Game)
9:15 AM – 10:35 AM	1 Hour 20 Minutes	Events	-Team Investigation	-3D Tic-Tac-Toe
10:35 AM – 10:50 AM	¼ Hour	Break	-Construction Derby	-Capture
10:50 AM – 12:00 noon	1 Hour 10 Minutes	Games		
11:30 AM – 1:00 PM	1 ½ Hour	Lunch is Served & Activities		
1:00 PM – 2:00 PM	1 Hour	Award Assembly		