# MATHS AND SPORTS

IES Guía

#### MATHS AND SPORTS: THE PERFECT MATCH

• The majority of us don't know the importance that maths has in sport. As an example, all the achievements of an athlete are based in numbers and maths (mundial record, scores, marks in athletics...)

- Another math point that is related with sport is the use of stadistics, because this science can provide objective data to an athlete relationated with her body, like if he/she in shape or not, if he/she must to improve something of his/her body (flexibility, resistance...), known the real results of an athlete, etc...

### STRATEGY AND MOVEMENT



In sports maths are used too for plot a strategy and calculate a throw or move.

For example:

- The power, angle and trajectory of a shot.
- Distances and positions for a better attack or defense.

#### STATISTICS

- Theres is a algorithm of mats that can reduce the lesions of quadriceps.
- The use of the theorem of Euler to make soccer balls.
- The use of the time in differents sports.



#### APPLICATIONS OF THE MATHS IN SPORTS

- 1. Physics can be used to guess when is the perfect moment for a surfer to take the wave.
- 2. To measure the perfect trajectory of a hit in golf.
- 3. The movements that a dancer should do to improve his performance.
- 4. To measure the perfect placement of a football player.



## THE END THANKS FOR YOUR ATTENTION!!