## UNITED NATIONS COLLEGE I.E.D.

PREPARATORY WORKSHOP
II TRIMESTER
MATHEMATICS - 501
This workshop must be copied and solved in the mathematics notebook, as a requirement to present the competency-based test.

## THE MEASURES OF CENTRAL TENDENCY



## MEAN, FASHION AND MEDIUM

The mean is the value you get by adding up all the data and dividing the result by the amount of data. The median is the value that occupies the central position when all the data is ordered in increasing or decreasing order. Fashion is a value that is repeated.

1) The ages of 8 children going to a party are: $2,2,3,5,7,7,9,10$. Finding the Middle Ages
2) Calculate the average of the following data: 11, 6, 7, 7, 4.

3 )On an exam graded from 0 to 10, 3 people got 5 grades, 5 people got 4 grades, and 2 people got 3 grades. Calculate the average grade.
4) Calculate the median of the following: $11,6,7,7,4$.
5) Find the mean, median, and mode of the following values: $84 ; 91 ; 72 ; 68 ; 87 ; 78 ; 65 ; 87$;
6) The manager of a department store is interested in knowing how many complaints the customer service department receives about the quality of electrical appliances sold by the stores. Records for a 5 -week period show the following number of weekly claims: $13,15,8,16$, and 8 .
a. Calculate the average number of weekly claims.
b. Calculate the median number of weekly claims.
c. Find fashion.
7)The shoe size of a group of children is: $26,26,27,28,30,26,30,28,26$. Determine the mean, mode, and median.
8) Saúl's grades in the area of mathematics are: $80,50,60,40,50,60,70,30$. Find the Sock, Fashion \& Median.

Analyze data tables and respond.

El viernes pasado fue la fiesta de disfraces de la escuela. En la clase de Daniel 6 niños fueron disfrazados de superhéroes, 4 de animales y 2 de pirata. Daniel se disfrazó de momia. ¿En qué clase está Daniel?

| Clase A |  |
| :---: | :---: |
| 1po dedstraz | cantidad |
| Superhéroe | 6 |
| Momia | 8 |
| Animales | 4 |
| Pirata | 7 |


| Clase B |  |
| :---: | :---: |
| 1padedisicu | Cantas |
| Superhéroe | 6 |
| Momia | 1 |
| Animales | 4 |
| Pirata | 2 |


| Clase C |  |
| :---: | :---: |
| Mpo dedsficz | cantidad |
| Superhéroe | 9 |
| Momia | 1 |
| Bombero | 9 |
| Pirata | 2 |

Mi profesor pasa lista todos los días y apunta las inasistencias en una tabla. La semana pasada faltaron más niños el primer día de la semana que el tercero. Yo falté el jueves. Encuentra la tabla de inasistencias de la semana pasada.

| Inasistencias |  |
| :---: | :---: |
| Lunes | 3 |
| Martes | 2 |
| Miércoles | 3 |
| Jueves | 1 |


| Inasistencias |  |
| :---: | :---: |
| Lunes | 7 |
| Martes | 4 |
| Miércoles | 3 |
| Jueves | 2 |


| Inasistencias |  |
| :---: | :---: |
| Lunes | 4 |
| Martes | 3 |
| Miércoles | 2 |
| Jueves | 0 |

## Read the information about Cartesian plane

The Cartesian plane is like a map made up of two number lines called axes. These axes intersect or intersect at a right angle ( 90 degrees).

The axes are: $x$-axis and $y$-axis. The axes divide the plane into four parts called quadrants.


Make this adventure day a memorable one by writing the coordinates of the given points below.

11) Find the coordinates, to find the location of each element.

12) Write down the coordinates where they are: the police station, the hospital, the school, the theatre and the zoo

13) Build the Cartesian map in your notebook and locate the following coordinates:

Gato

$(0.8)(0.12)(3.15)(5.15)(5.14)(3.12)(2.12)(2.9)(4.11)(6.11\rangle(8.9)(8.13)$ $(10,11)(14,11)(16.13)(16.7)(15.6)(13.5)(11,5)(9.6)(8,7)(8,4)(9,4)(9,2)$ $(6.2)(6.0)(4.6)(3.5)(3.4)(5.4)(5.2)(1.2)(0.8) \times(9.8)(9.10)(11.10)(118)$ $(9.8) \times(13,10)(15.10)(15.8)(13.8)(13.10) \times(11.7)(12.8)(13.7)(11.7)$

A first-degree equation is a mathematical equality with one or more unknowns. These unknowns must be cleared or solved in order to find the numerical value of equality.
14) $X+7=26$
15) $X-18=40$
16) $X+6=17$
17) $1+X=123$
18) $25-X=23$
19) $x+45=90$

A decimal number is one that has an integer part and a decimal part, both parts separated by the decimal separator that can be a period, a comma, or an apostrophe. The decimal number is a way of writing a fraction.
20) In an ecological outing, Roberto traveled 13.45 km , how do you read this number of kilometers?
21) Ramiro answered 14 questions out of a total of 25 What percentage of the total questions did Ramiro answer?
22) Fernando wants to fence his rectangular land of 37.09 m long by 12.85 m wide, with 3 lines of barbed wire How many meters of barbed wire should you buy?
23) The maximum load of an elevator is 200 kg , if the members of a family weigh: father 83.5 kg , mother 56.8 and Child 47 Will they be able to go up in a single trip?
24) Mauritius is 1.73 m tall How tall is a building that is equivalent to 17.5 times the height of Mauritius?
25) The speed of a vehicle is 65.8 km per hour. If it maintains that speed, how many kilometers does it travel in three and a half hours?
26) Sofia does five and a half laps of a 250.5 m long track How many meters does Sofia cover in total?
27) To prepare a pizza, 0.63 kg of flour is used. In the hold there are two bundles of flour: one of 50 kg and the other of 15.5 kg . If they prepare 20 pizzas every day, how many days does the flour last?
28) A 5.25 m long roll of tape is cut into pieces of 0.25 each. How many pieces can be obtained
29) A cyclist travels 167 km in the first stage of a competition, 18074 dam in the second and $2,025 \mathrm{~m}$ in the third. How many meters does he travel in total?
30) In a relay competition, between the first two athletes they made $1,780 \mathrm{~m}$. if the Race ended with a total distance of 2 km How many decameters did the third athlete travel?

