E- Bulletin

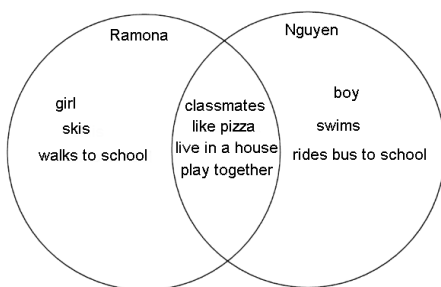## Colegio Bilingüe New Horizons

PAP Algebra 9th grade
Coordinador: Emma Encarnación
Profesora: Livia Gouriliova
Directora: Ana María Martijena

Contents:

- Set of Real Numbers: Concepts, properties and operations.

- Power of real numbers with integer exponents, scientific notation.

- Intervals in the real line, absolute value of a real number.

- Introduction to logic and set notation: Representations. Venn diagram.

- Operations between sets. Union, intersection, symmetric difference, power set. Partition of a set.

- Resolution of problems using operations between sets.

- De Morgan's Laws.

- Relations and functions: Concept of ordered pair and binary relationship. Domain and range of a relationship.

- Concept of function, notation and evaluate functions.

Students will be able to:

- Use the laws of exponents to multiply, divide and find powers of variables with exponents.
- Simplify exponential expressions involving multiplying like bases, zero as an exponent, dividing like bases, negative exponents, raising a base to two exponents, raising a product to an exponent, raising a quotient to an exponent.
- Use the power properties for integer exponents, apply them to scientific notation.
- Use Venn diagrams in a variety of situations.
- Determine the Union or Intersection of two sets.
- Determine symmetric difference, power set, and partition of a set.
- State and verify De Morgan's Laws.
- Know what a relation, function, domain and range are.
- Identify if a relation is a function or not.