

Mathematics and Associated Teaching Methods I

FRACTIONS **RATIONAL NUMBER**

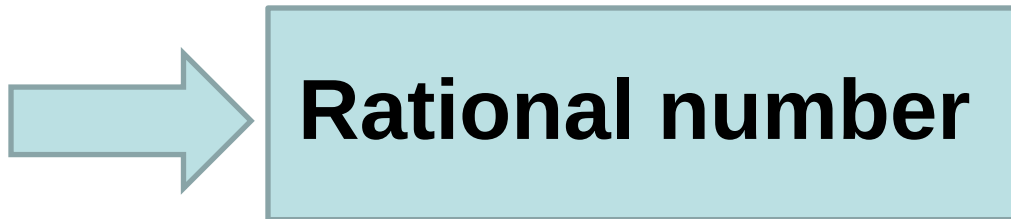
Degree in Primary Education Teaching

Fractions

- Definition
- Contexts:
 1. As a part of a whole.
 2. As a result of a measure.
 3. As a result of a sharing out.
 4. As a ratio.
 5. As an operator (percentages).

Types of fractions

- Equivalent fractions
- Irreducible fractions



- Proper and improper fractions



Fraction or mixed number

Graphical representation of rational numbers

- In the number line each rational number is associated with a point of the line.
- There are still uncovered gaps in the number line (irrational numbers).

Order of the rational numbers (fractions comparison)

Given two or more fractions it is possible to check what is the one representing a greater rational number.

- Two ways:

- a) Graphical way: representing both numbers in the number line.
- b) Numerical way: finding the corresponding equivalent fractions with the same common denominator.

Operations with fractions

- Addition and subtraction of fractions.
- Multiplication of a natural number by a fraction (and vice versa).
- Multiplication of fractions.
- Division of a fraction by a natural number.
- Division of a natural number by a fraction.
- Division of fractions.