UNIT 2

# The rational Numbers

* Set of ALL numbers in the form
* p is the numerator, q is the denominator. Both are integers.
* Therefore, ,
* Some of the laws also apply for . Only the letters, C. A. M. E. L. T. E. A. Dwill apply.

*Law 10 (existence of additive inverses):*

For every integer m there exists an integer n such that

m + n = 0.

*Applies for, and not*

= {1,2,3,…} Set of Rational Numbers

*Law 11 (the existence of multiplicative inverses)*

For every non-zero rational number x there exists a rational

number there exists a rational number y such that

*Basically, the multiplicative inverse of any number can be found by swapping the numerator and denominator. Applies for*

## Pythagoras’ theorem

* *The square on the hypotenuse is the sum of the squares on the other two sides.*