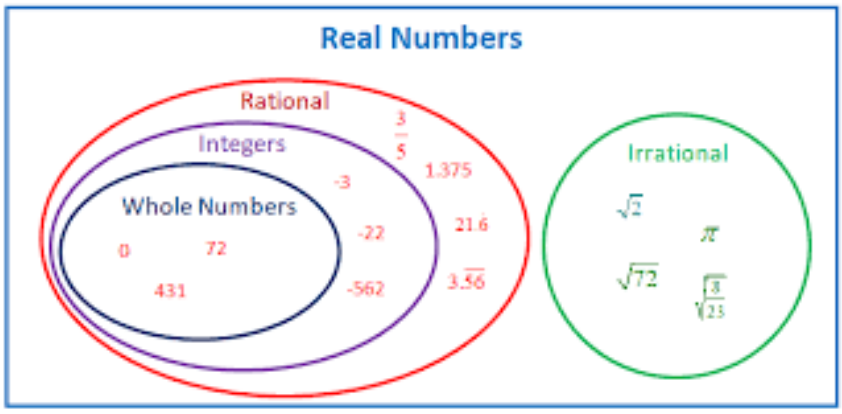
Real Numbers:

All numbers including both rational and irrational numbers are called **Real Numbers**.

R = – 2, $-\frac{2}{3}$, 0, 3 and √2

Real Numbers are represented by **R**



Example 9: Find any two rational numbers between $\frac{1}{5}$ and $\frac{2}{7}$

Example 10: Find a rational between 3 and 4?

Hint: If a and b are two positive rational numbers such that ab is not a perfect square of a rational number, then $\sqrt{ab}$ is an irrational number lying between *a* and *b*.

Example 11: Examine whether the following numbers are rational or Irrational.

a. $(3+\sqrt{3})(3-\sqrt{3})$

b. $(3+\sqrt{3})+(3-\sqrt{3})$

c. $\frac{10}{2\sqrt{5}}$