## Math-2A VOCAB 3-1 (Radicals)

<u>Irrational numbers</u>: <u>cannot</u> be written as a ratio of integers: ½, -¾, etc.

The decimal version of an irrational number <u>never terminates</u> and <u>never repeats.</u> (5.13257306...).

If we see the radical symbol, the number is usually irrational  $\sqrt{3}$  (unless it is a "perfect square).  $\sqrt{4} = 2$  (rational #)

Radical: is made up of:

- a) Index number
- b) Radicand
- c) Radical symbol

 $\sqrt[2]{3}$ 

Radical symbol

Index number: if you do not see an index number it is a '2' and means "square root."

Radicand (the number or expression under the radical symbol)

$$x=\sqrt{3}$$
 The "square root of 3" means: "what number squared equals 3?"  $x^2=3$ 

$$x = \sqrt[3]{4}$$
 The "3<sup>rd</sup> root of 4" means: "what number cubed equals 4?"