Number and Operations

Goal: The learner will understand and compute with real numbers

Objective:

1.01 Develop number sense for the real numbers.

c) Use estimates of irrational numbers in appropriate situations.

To achieve this objective, students should:

- Find the decimal approximation of square roots and cube roots. (less than 1000 between two consecutive whole numbers in appropriate situations)
- Recognize and use the radical sign when finding square roots.
- Recognize that every positive Real number has two Real roots, one positive and one negative. The $\sqrt{x}$ is the positive square root, called the principal root and $-\sqrt{x}$ represents the opposite of the positive root.

  Example: $\sqrt{16} = 4$

  $-\sqrt{16} = -4$ (the opposite of the square root of 16 is negative 4)

  $\pm\sqrt{16} = \pm 4$
- Recognize equivalent forms of irrational numbers. Example: $\sqrt{12} = 2\sqrt{3}$