**Lesson 10 Notes: Division of Whole Numbers**

**Definition of Division:**

**Algorithms for Division:**

1)

2)

3)

**Example A:**

Suppose you have 24 tennis balls, which you want to divide equally among 3 people. How many tennis balls would each person receive?

**Example B:**

Suppose you have 24 tennis balls and want to give 3 tennis balls to as many people as possible. How many people would receive tennis balls?

*NCTM Standards:*

*In prekindergarten through grade 2, students should begin to develop an understanding of the concepts of multiplication and division. They can investigate division with real objects and through story problems, usually ones involving the distribution of equal shares.*

Long Division

**Example C:** Determine the whole number quotient and remainder.

  

  

**\* Division Algorithm Theorem \***

*For any whole numbers “a” and “b”, with divisor “b” not equal to 0, there are whole numbers “q” quotient and “r” remainder such that a = bq +r*

* *The remainder “r” is always less than the divisor “b”.*

EXPONENTS

**A few Rules of Exponents:**

Multiplication Division Power to a Power

  

Perfect Cube Numbers

Perfect Square Numbers

**ORDER OF OPERATIONS**

   