INTRODUCTION TO ALGEBRA

Tuesday, 10th May, 2016

Objectives

- What algebra is
- The preliminary rules in algebra

Introduction

Some numbers are not known yet as at when a mathematic question was asked. These unknown numbers are usually represented with alphabets. This kind of mathematics that find the values of unknown numbers is called algebra.

Algebra

Algebra is the branch of mathematics that uses alphabets to represent unknown numbers. For example, 4 + 6 = x; y = x + 3.

Rules of Algebra

Some of the rules in algebra are:

- When plus (+) crosses the equals sign (=), it turns into minus (–) and if minus sign crosses the equals sign it turns into plus.
- If division sign (÷ or /) crosses the equals sign, it would become times (x). Likewise, if times crosses the equals sign, it would become division.

Examples

1. $x + 4 = 12$; find x.

Solving

$x + 4 = 12$

$x = 12 – 4 = 8$.

2. $a \times 4 = 24$; find a

Solving

$a \times 4 = 24$

$a = 24 \div 4 = 6$.