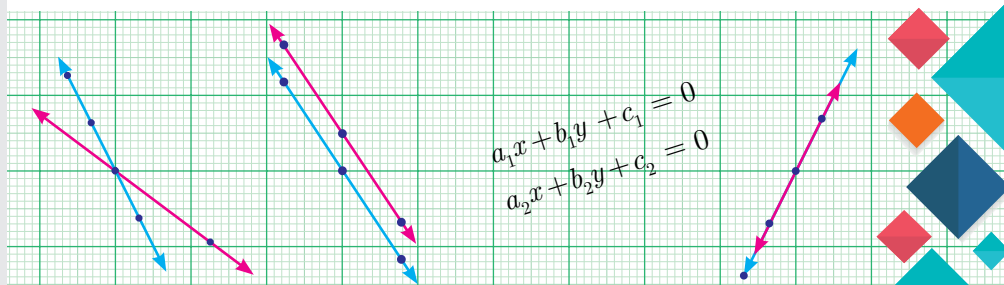


3



Diophantus



ALGEBRA

In real life, I assure you, there is no such things as Algebra.

- Fran Lebowitz

Diophantus of Alexandria an Alexandrian Hellenistic mathematician who lived for about 84 years, was born between A.D(C.E) 201 and A.D(C.E) 215. Diophantus was the author of a series of books called Arithmetica. His texts deal with solving algebraic equations. He is also called as “the father of algebra”.

Learning Outcomes



- To understand the classification of polynomials and to perform basic operations.
- To evaluate the value of a polynomial and understand the zeros of polynomial.
- To understand the remainder and factor theorems.
- To use Algebraic Identities in factorisation.
- To factorise a quadratic and a cubic polynomial.
- To use synthetic division to factorise a polynomial.
- To find GCD of polynomials.
- Able to draw graph for a given linear equation.
- To solve simultaneous linear equations in two variables by Graphical method and Algebraic method
- To understand consistency and inconsistency of linear equations in two variables.



3.1 Introduction

Why study polynomials?

This chapter is going to be all about polynomial expressions in algebra. These are your friends, you have already met, without being properly introduced! We will properly introduce them to you, and they are going to be your friends in whatever mathematical journey you undertake from here on.