0.1 Single-variable polynomials

0.1.1 Introduction

A single-variable polynomial is an equation of the form:

$\sum_{i=0}^{n} a_i x^i = 0$

For example:

- $x = 1$
- $x^2 = 4$
- $x^2 - 3x + 2 = 0$

0.1.2 Degrees

The degree of a polynomial is the highest-order term.

For example $x^3 + x = 0$ has degree 3.

0.1.3 Roots of single-variable polynomials

A solution to a polynomial is a root.

For example 1 and 2 are roots of $x^2 - 3x + 2 = 0$