

# TUGAS POLINOMIAL CHAPTER 15

Tugas Mata Kuliah SK5003 Pemrograman dalam Sains  
Numpy Python 3

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## TASK 1

### Soal

**15.1** Develop a Python program to evaluate polynomial function  $y = x^4 + 4x^2 + 7$ . Find an appropriate interval of  $x$  for which the function evaluation is done and plot the graph.

**15.4** Develop a Python program to solve the polynomial function  $y = x^4 + 4x^2 + 7$ .

### Jawab

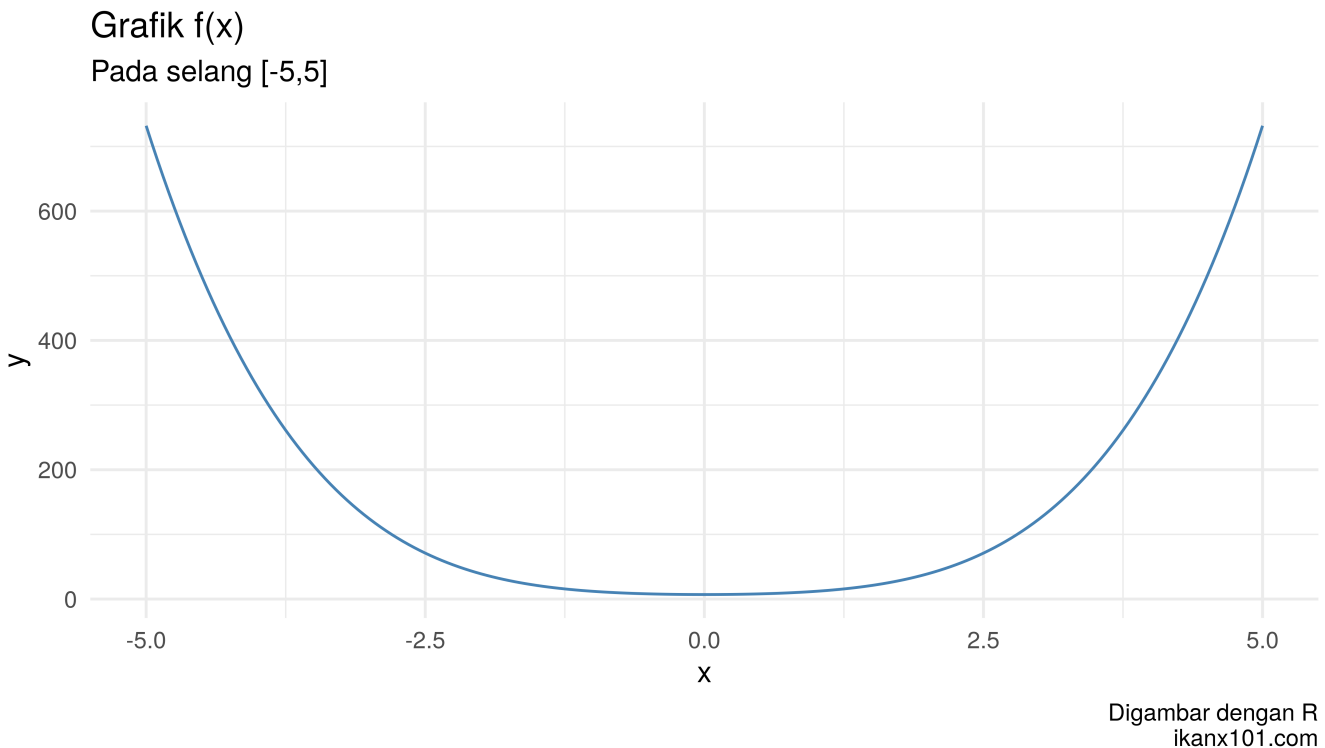


Figure 1: Gambar 15.1

Untuk menyelesaikan soal ini (menghitung nilai  $x$  dan  $y = f(x)$  lalu menggambar dan mencari akar), saya akan gunakan program *Python* berikut ini:

program di mari

Berikut adalah gambar grafiknya:

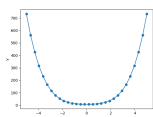


Figure 2: Gambar 15.1

## TASK 2

### Soal

**15.2** Develop a Python program to evaluate the polynomial function  $y = 3x^5 + 6$ . Find an appropriate interval of  $x$  for which the function evaluation is done and plot the graph.

**15.5** Develop a Python program to solve the polynomial function  $y = 3x^5 + 6$ .

### Jawab

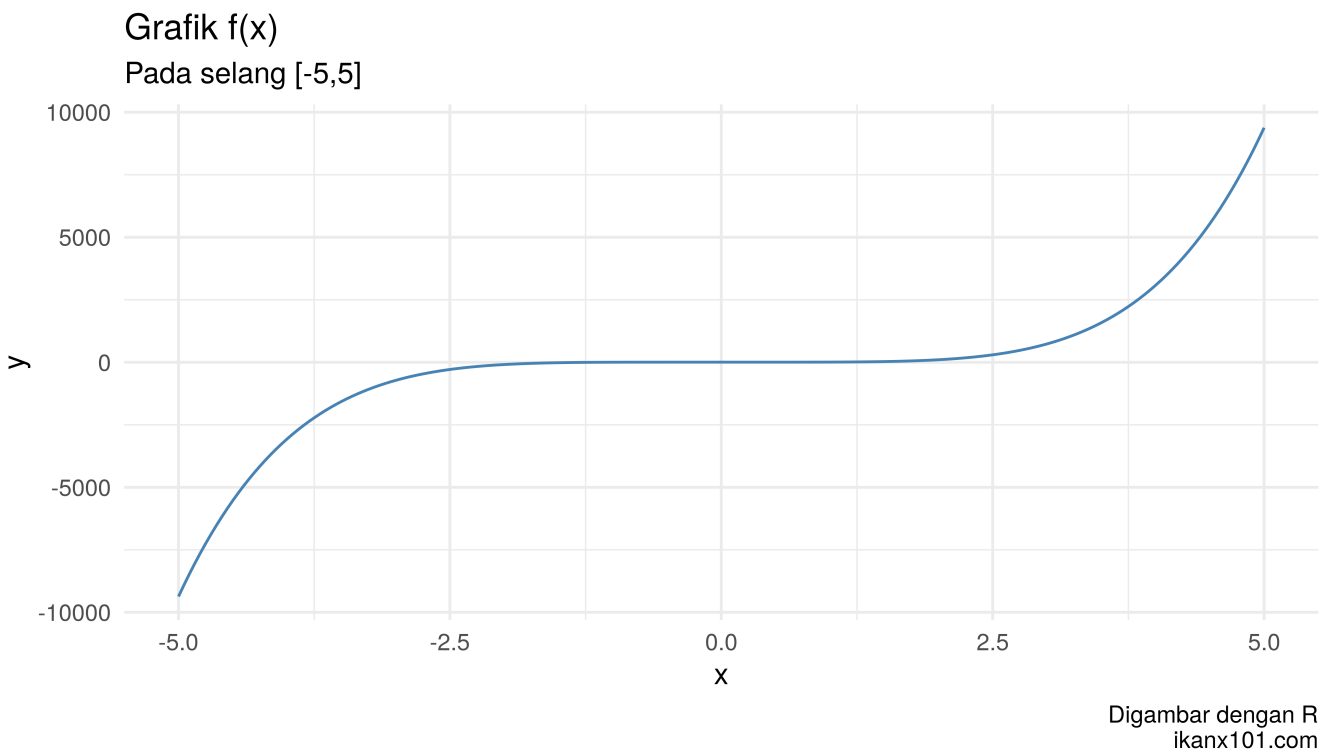


Figure 3: Gambar 15.2

## TASK 3

### Soal

**15.3** Develop a Python program to evaluate the polynomial function  $y = 2x^6 - 1.5x^5 + 5x^4 - 6.5x^3 + 6x^2 - 3x + 4.5$ . Find an appropriate interval of  $x$  for which the function evaluation is done and plot the relevant data.

**15.6** Develop a Python program to solve the polynomial function  $y = 2x^6 - 1.5x^5 + 5x^4 - 6.5x^3 + 6x^2 - 3x + 4.5$ .

### Jawab

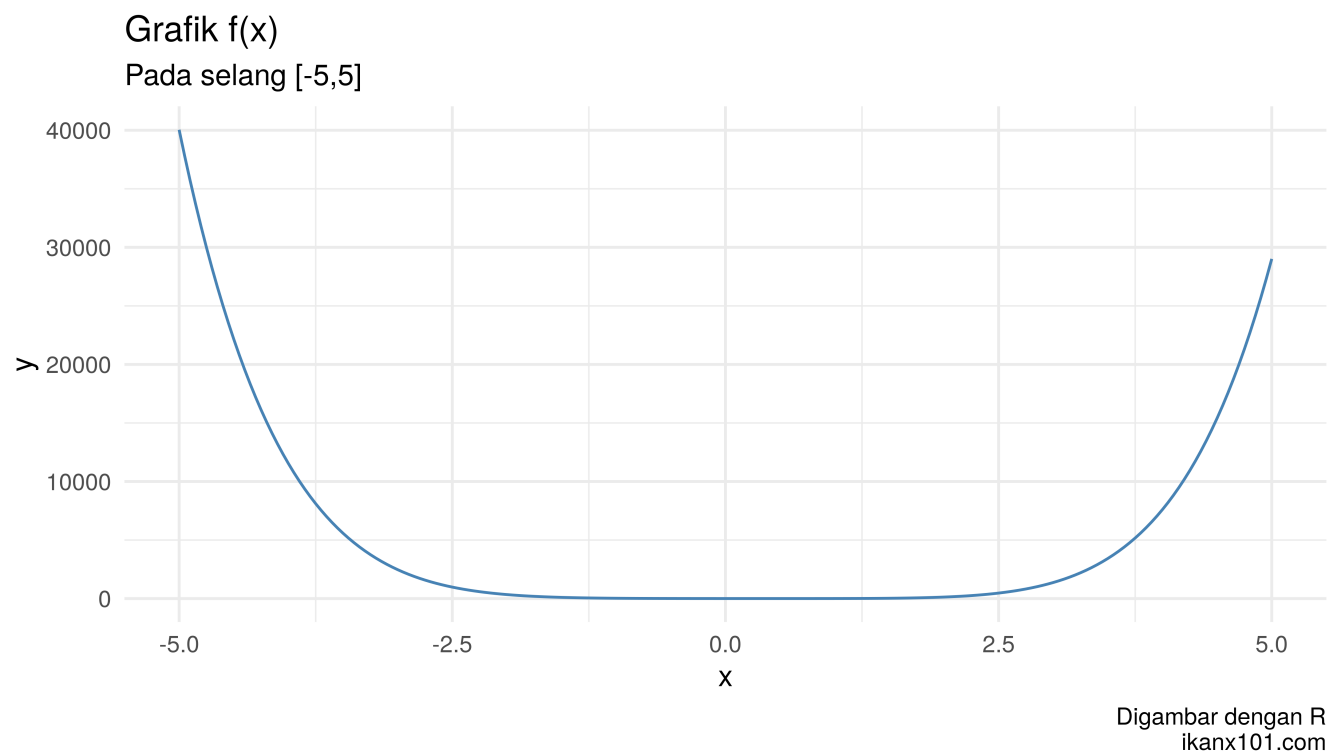


Figure 4: Gambar 15.3

**== End ==**