

Homework Set 9

DUE: NOV 26, 2018 (AT THE BEGINNING OF CLASS)

To be handed in:*Please write your solution to Problem 1 on only 1 sheet of paper.*

1. (a) Find the indefinite integral $\int x^3 - 6x^2 + 1 \, dx$

(b) Use your answer in (a) to solve the Initial Value Problem

$$\begin{cases} \frac{dy}{dx} = x^3 - 6x^2 + 1 \\ y(0) = 1 \end{cases}$$

2. Textbook (5th edition) Section 5.1, Exercises 1, 2, 5 – 7, 16 – 20, 24 – 26, 32, 34, 36, 43, 44, 53 – 55, 63 – 66, 85

3. Textbook (5th edition) Section 5.2, Exercises 33 – 36, 41 – 44