PSET NUMBER

Problem NUMBER-1

a) aligning equations:

$$f_1(n) = 1$$

$$f_2(n) = 2$$

$$f_3(n) = 3$$

$$f_4(n) = 4$$

$$f_5(n) = 5$$

b) gathering equations

$$f_1(n) = 1$$

$$f_2(n) = 2$$

$$f_3(n) = 3$$

$$f_4(n) = 4$$

$$f_5(n) = 5$$

Problem NUMBER-2

- **a)** include code:
- **b)** casework:

Case 1: case 1

this is case 1

Case 2: case 2

this is case 2

c) theorems and proofs:

Theorem: this is a theorem

Proof. This is a proof

Base Case: This is a base case

Inductive Step: This is an inductive step