



**Modeling A System And
Improving it In Iterations**
Work Sheet: 08-IPP-01-WS



Questions:

A. Solve the following questions in the class with the help of your teacher.

1. Guess the function based on the information given.

Iteration	Information	Function $f(x)$
1	Function returns 0 when input is 0, $f(0)=0$	
2	$f(1)=1$	
3	$f(2)=4$	
4	$f(3)=9$	

Function: $f(x)=$

2. Guess the function based on the information given.

Iteration	Information	Function $f(x)$
1	Function returns 5 when input is 0, $f(0)=5$	
2	$f(2)=7$	
3	$f(3)=11$	
4	$f(4)=17$	

Function: $f(x)=$



**Modeling A System And
Improving it In Iterations**
Work Sheet: 08-IPP-01-WS



3. Guess the function based on the information given.

Iteration	Information	Function $f(x,y)$
1	$f(2,2)=4$	
2	$f(3,2)=6$	
3	$f(1,2)=2$	

Function: $f(x,y)=$

B. Solve the following questions on your own.

1. Guess the function based on the information given.

Iteration	Information	Function $f(x,y)$
1	$f(0,0)=1$	
2	$f(2,2)=5$	
3	$f(3,2)=6$	
4	$f(3,3)=7$	

Function: $f(x,y)=$

2. Guess the function based on the information given.

Iteration	Information	Function $f(x)$
1	$f(0)=3$	
2	$f(1)=4$	
3	$f(2)=7$	
4	$f(3)=12$	

Function: $f(x)=$

Name:

Class:

Div:

Roll. No:

3. Guess the function based on the information given.

Iteration	Information	Function $f(x)$
1	$f(0)=0$	
2	$f(1)=1$	
3	$f(2)=8$	
4	$f(3)=27$	

Function: $f(x)=$

Answers:

Sr no	Answer
A.1	$f(x) = x^2$
A.2	$f(x) = x^2 - x + 5$
A.3	$f(x, y) = xy$
B.1	$f(x, y) = x + y + 1$
B.2	$f(x) = x^2 + 3$
B.3	$f(x) = x^3$