

## WORKSHEET

### LESSON 3-4 : ANALYZING GRAPHS OF POLYNOMIAL FUNCTIONS

1)

Determine consecutive values of  $x$  between which each real zero of the function  $f(x) = x^4 - x^3 - 4x^2 + 1$  is located using the table below.

$x$	$f(x)$
-2	9
-1	-1
0	1
1	-3
2	-7
3	19

The zeroes are  
between  
( join the consecutive  
values of  $x$  between  
which zeroes are  
located )

-2      -2  
-1      -1  
0      0  
1      1  
2      2  
3      3

2)

**FIND THE X-VALUE AT WHICH RELATIVE MAXIMA AND RELATIVE MINIMA OF A FUNCTION OCCUR FROM IT'S TABLE OF VALUES**

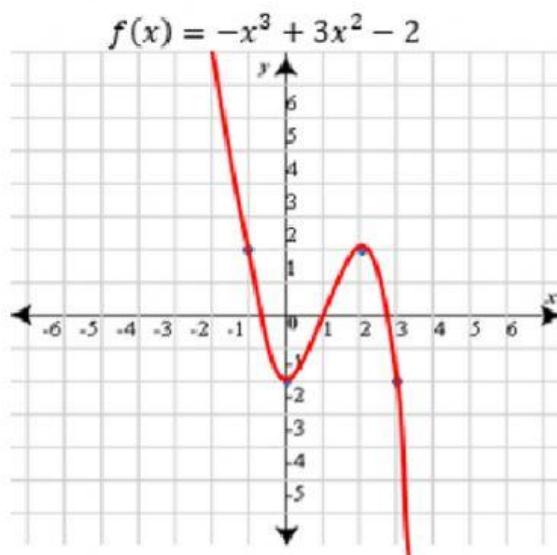
$x$	$f(x)$
-2	5
-1	1
0	-1
1	0
2	2
3	1
4	-1

Relative maximum at  $x =$

Relative minimum at  $x =$

3)

FIND THE X-VALUE AT WHICH RELATIVE MAXIMA AND RELATIVE MINIMA OF A FUNCTION OCCUR FROM IT'S GRAPH



Relative maximum at  $x =$

Relative minimum at  $x$