

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

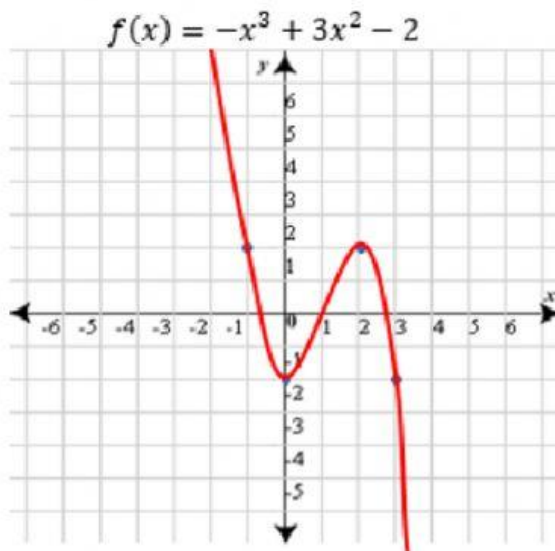
x	$f(x)$
-2	5
-1	1
0	-1
1	0
2	2
3	1
4	-1

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