

Match the function graphs (f) with the graphs of their derivatives (d).

A	<u>slope = 0</u>	I	
B	constant neg slope	J	
C	constant pos slope	K	
D		L	
E		M	
F		N	
G		O	
H			

MATCHING:

A	8
B	1
C	10
D	5
E	3
F	7
G	12
H	11
I	2
J	9
K	14
L	4
M	13
N	15
O	none

1		9	
2		10	
3		11	
4		12	
5		13	
6		14	
7		15	
8			

AP Calculus BC

Chapter 3: Given the graph of f' , find the graph of f

Given the graph of f' , find the following:

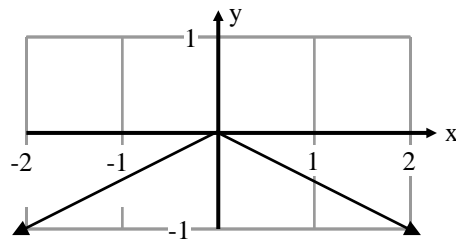
- (a). The intervals on which f is increasing
- (b). The intervals on which f is decreasing
- (c). The relative extrema of f
- (d). Where the graph is concave upward
- (e). Where the graph is concave downward
- (f). The x -coordinates of any points of inflection

You may want to draw f' and f'' number lines then indicate intervals using interval notation.

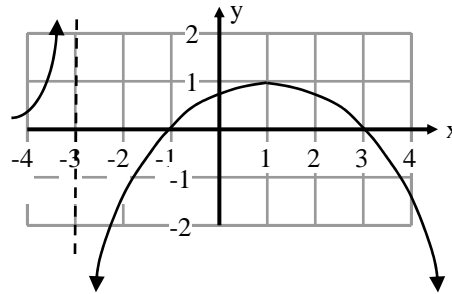
And sketch the graph of f , where f is continuous.

In – class Examples:

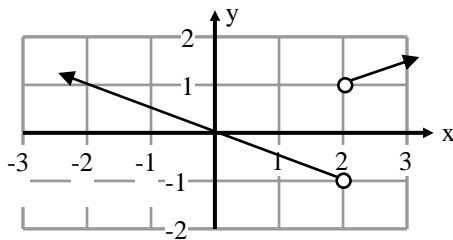
1. The zero of f is 0.



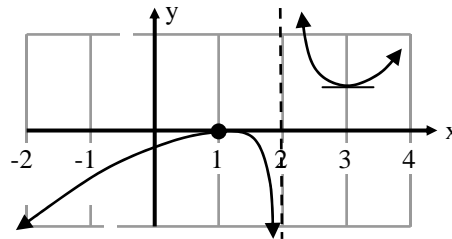
3. The zeroes of f are $-4, -2, 1, 5$.



2. The zeroes of f are 0, 4.

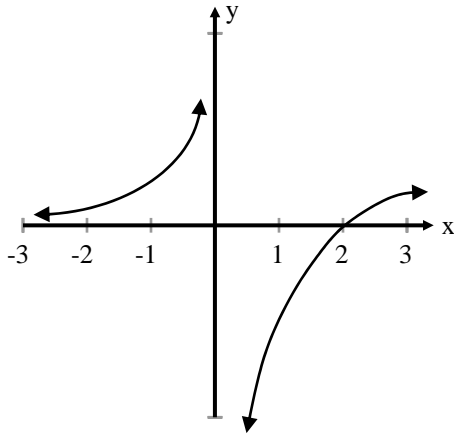


4. The zeroes of f are 1, 3.

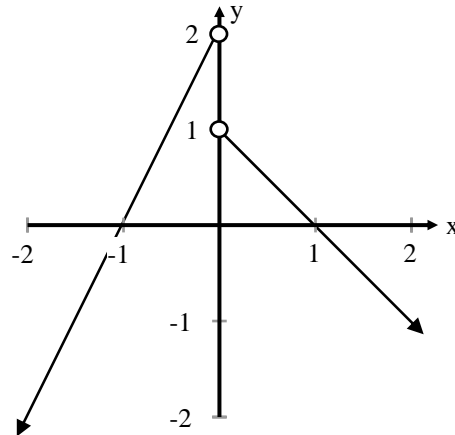


Homework Problems:

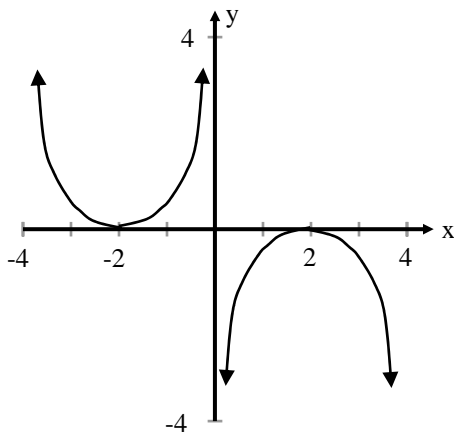
1. The zeroes of f are 0, 4.



3. The zeroes of f are $-2, 0, 2$.



2. The zeroes of f are $-2, 2$.



4. The zeroes of f are $-1, 1$.

