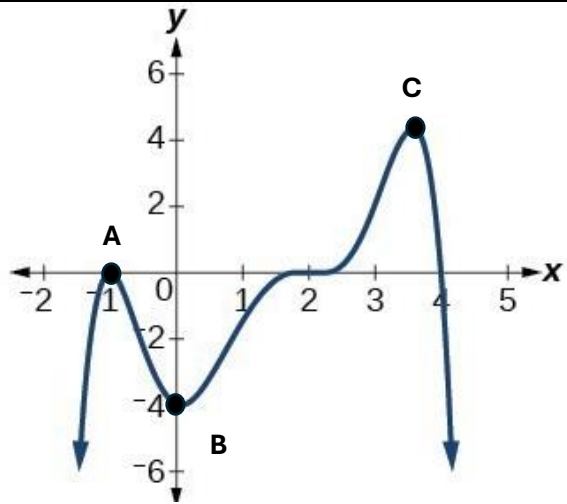


AP Pre-Cal Post Book Classwork

Refer to the graph at the right to answer the following questions:

1. Classify point A, B, and C as Relative Max/Min and/or Global Max/Min.
2. In terms of concavity how would you describe the interval $(3, \infty)$?
3. How many points of inflection does the graph have?
4. What is the Global Min for the graph?



5. Determine the concavity of the function based on the table of values provided: (Justify)

x	-2	-1	0	1	2	3
$f(x)$	$-\frac{1}{4}$	$-\frac{1}{2}$	-1	-2	-4	-8

6. If y varies directly as x , and $y = 8$ when $x = 5$, find y when $x = 4$.

7. If y varies inversely as x^2 , and $y = 10$ when $x = 2$, find y when $x = 3$.

Classify each as Linear, Quadratic, or Exponential. Show work to justify your conclusion.

8.

x	y
-2	6
-1	3
0	2
1	3
2	6

9.

Volleyball Tournament	
Round	Teams Left
1	16
2	8
3	4
4	2

10. Write the equation of the function represented by the table of values to the right:

m	$j(m)$
0	1.2
1	0.6
2	0.3
3	0.15
4	0.075

11. The population of a species with 750,000 is devastated by an unknown virus that kills 20% of the population per day.

a) Write the exponential function that models this.

b) How many species will be left after one week? (Answer should be calculator ready)