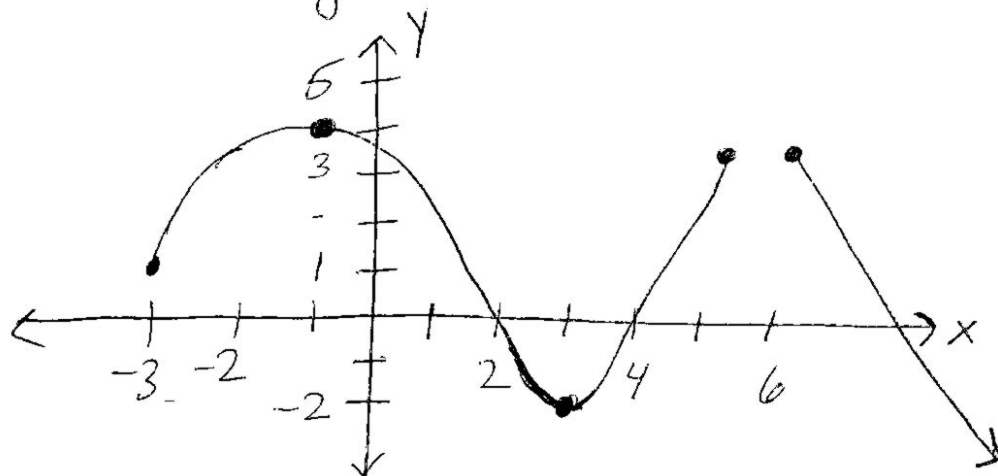


# Quiz 5 - Make Up

Problem 1: (20 pts) The graph of a function  $f$  is given.



- (a) (6 pts) Find the domain and range of  $f$ .
- (b) (4 pts) Find the intervals on which  $f$  is increasing.
- (c) (4 pts) Find the intervals on which  $f$  is decreasing.
- (d) (3 pts) Find the local max. values of  $f$  and the  $x$ -values at which they occur.
- (e) (3 pts) Find the local min. values of  $f$  and the  $x$ -values at which they occur.

(Problem 2 next page)

Problem 2: The table below gives the population in a town for the period 2002 - 2006.

Figures shown are for Jan. 1 in each year.

(a) (3 pts.) What was the average rate of change of population between 2002 and 2005? (units!!)  
↑ Don't forget.

(b) (3 pts.) What was the average rate of change between 2003 and 2004?

(c) (3 pts.) For what period of time was the population increasing?

(d) (3 pts.) For what period of time was the population decreasing?

Year	Population
2002	1,483
2003	994
2004	1003
2005	926
2006	892