

1.  $f(x) = x + \frac{25}{x}$  for  $x$  in the interval  $(-\infty, 0)$ . Find the absolute maximum and the absolute minimum(if any) of  $f$  on the given interval.

2. Let  $g(x) = (x^2 - 9)^3$ . Find the absolute maximum and the absolute minimum of  $g$  on the interval  $[-2, 4]$ .