1. (a) (5 pts) Find the intervals on which $f$ is increasing or decreasing.
(b) ( 5 pts ) Find the local maximum and minimum values of $f$.
(c) ( 5 pts ) Find the intervals of concavity and the inflection points.

$$
f(x)=x^{4}-2 x^{2}+2
$$

2. ( 5 pts ) Find the limit. What can you say about the asymptotes of the function?

$$
\lim _{x \rightarrow-3^{+}} \frac{x+2}{x+3}
$$

