Very short answer questions

1. (a) \[3 \text{ marks}\] What is the worth, after 9 months, of an investment of $300 with a nominal interest rate of 11% compounded quarterly?

   Answer:

(b) \[2 \text{ marks}\] How fast is the investment (from part (a)) growing after 9 months?

   Answer:
Long answer questions - You must show your work

2. [7 marks] Find the absolute maximum and minimum of \( f(x) = x^{2/3} + x \) on \([-1, 1]\) (value and point).

Answer:

3. [8 marks] A kite is flying 50 meters above the ground when the wind starts to blow it away in a direction parallel to the ground at the rate of \( \frac{m}{sec} \). At what rate must the string be let out when the length of string already let out is 100 meters?

Answer: