Very short answer questions

1. (a) [3 marks] What is the worth, after 9 months, of an investment of $250 with a nominal interest rate of 13% compounded quarterly?

Answer:

(b) [2 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 30 meters above the ground when the wind starts to blow it away in a direction parallel to the ground at the rate of \( 3 \frac{m}{\text{sec}} \). At what rate must the string be let out when the length of string already let out is 60 meters?

Answer: