No notes or calculators. Show all work.

Consider the following function:

$$f(x) = 2x^3 + 3x^2 - 12x + 1$$

1. (3 points) Find the critical numbers.

2. (5 points) State the <u>intervals</u> of increase and decrease. (minus 1 point if not answers not in interval form).

3. (2 points) Determine if there is a relative max or min at each critical number found in (1).