

**Name:**

[1 pt]

**Problem 1.** Use the first derivative test to find the relative maximum and minimum values of

$$f(x) = \frac{1}{3}x^3 - \frac{3}{2}x^2 + 2x + 1 .$$

[5 pts]

**Problem 2.** Use the second derivative test to find the relative maximum and minimum values of

$$f(x) = x^2 + \frac{2}{x} .$$

[5 pts]