

RELATIVE EXTREMA EXERCISES

For each problem below, identify the critical point(s) and the coordinates of all relative extrema and label each as either a relative maximum or a relative minimum. Give exact answers in fraction form

1. $f(x) = -x^2 - 2x + 8$

2. $f(x) = x^2 - 6x + 1$

3. $f(x) = x^4 - 5x^2 + 1$

4. $f(x) = x^3$

5. $f(x) = x^3 - x^2 - x - 1$