6-3 Finding Critical Points

Name _____

For 1-4, find the critical points of each function and list them as ordered pairs. Don't worry what type of critical point they may be.

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

_____ 2. $f(x) = x^4 - x^2 - 6$

_____ 3. $f(x) = \frac{1}{4}x^4 + x^3 - \frac{1}{2}x^2 - 3x$

_____ 4. $f(x) = \frac{1}{3}x^3 - x^2 - 8x$

_____ 5. Find the critical points of $f(x) = 3x^3 - 18x^2 - 4$.
Determine whether each point represents a maximum, minimum, or point of inflection.

_____ 6. Find the critical points of $f(x) = x^3 - 3x^2 + 4$
Determine whether each point represents a maximum, minimum, or point of inflection.