

- 1. Where is f concave up? concave down?
- 2. Where does f have inflection points?
- 3. Suppose that f'(-1) = 0 and f'(1) = 0. If possible, classify x = -1 and x = 1 as local maxima or local minima of f.
- 4. Suppose that f'(0) = 0. Is f increasing or decreasing at x = 1? at x = -1?
- 5. Suppose that f'(-1) = -2 and f(-1) = 2. Could f(0) = 3? (*Hint:* Can you determine if f is increasing or decreasing on [-1, 0]?)