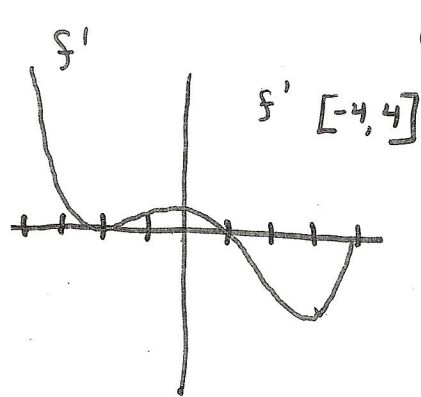
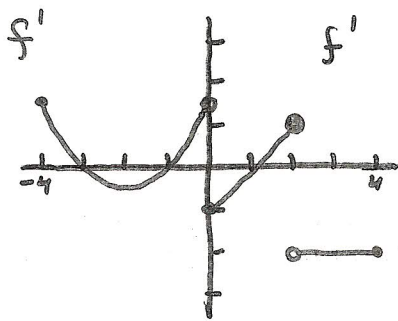


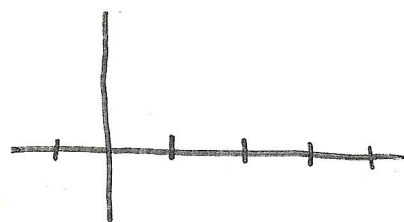
Connecting f' with the graph of f



- ①
- On what interval is f increasing?
 - On what interval is the graph of f concave up?
 - At what x -coordinates does f have local extrema?
 - What are the x -coordinates of all inflection pts of the graph of f ?
 - Sketch a possible graph of f .



- ②
- Find the x -coordinates of all local extrema and points of inflection of f .
 - Sketch a possible graph of f .



- ③ $f'(x) = 4x^3 - 12x^2$
- Identify where the extrema of f occurs.
 - Find the intervals on which f is increasing and decreasing.
 - Find where the graph of f is concave up and concave down.
 - Sketch a possible graph for f .