Lab – Using derivatives for graphs

1. For the following diagrams with signs for *f’* and *f’’*, draw a possible graph for *f*

A whiteboard with writing on it

Description automatically generated with low confidence

1. For the functions A-F below,
2. Find the formula of f’ and f’’.
3. Find the values of x where f’ and f’’ are equal to zero.
4. Create a numberline with the signs of f’ and f’’ as done in problem 1
5. Find the coordinates of the points of inflection, local maxima and minima
6. Draw the graph of *f* labeling max/min/pts of inflection. (feel free to check with Desmos)


10. on the interval [0,2pi]
11. (Hint: easier to rewrite as a product)
12. Optional: on the interval [0,2pi]