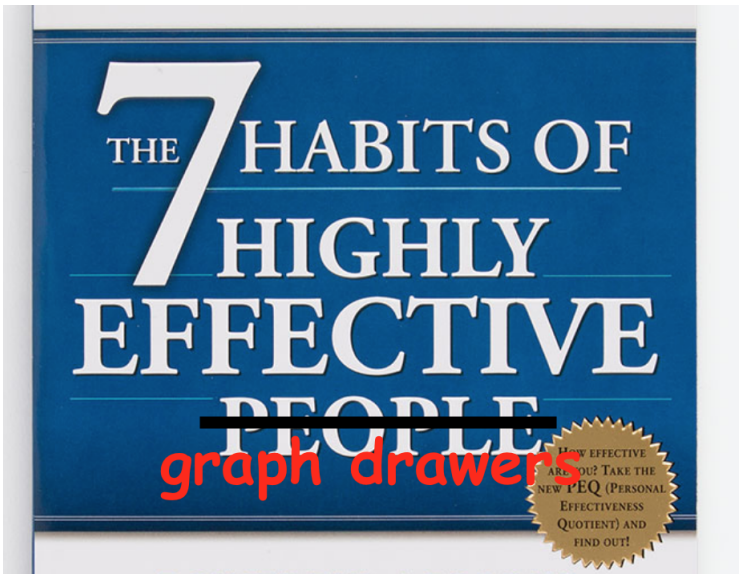

1 (Domain) Identify the domain of the function, expressed as a union of intervals

2 (Limits) Identify the limiting behavior of the function at the endpoints of the open intervals in the domain (including potentially $\pm\infty$)

3 (Monotonicity) Find the derivative of the function, and use this to identify the intervals where the function is increasing (positive derivative) and decreasing (negative derivative)

4 (Local extrema) Identify the local minima and maxima, using first derivative test

5 (Concavity) Find the second derivative of the function, and use this to identify the intervals where the function is convex (positive second derivative) and concave (negative second derivative), and to identify points of inflection

6 (Special points/features) Identify special points to "anchor" the sketch — intercepts of axes, local extrema, points of inflection, ... — and special features such as function being odd or even (which halves the work)

7 (Sketch) On a neatly drawn and labelled set of axes, plot a sketch of the graph of the function, incorporating all that was learned from points 1 through 6