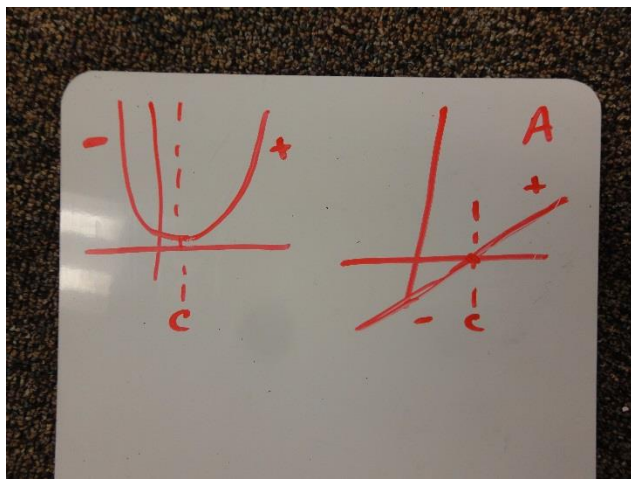
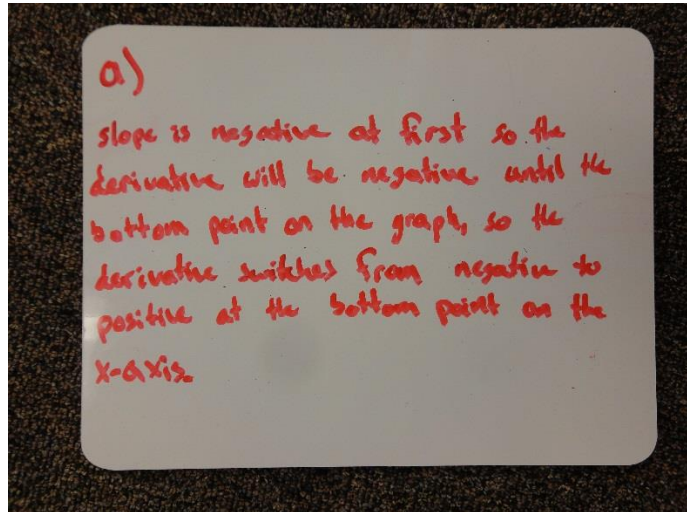
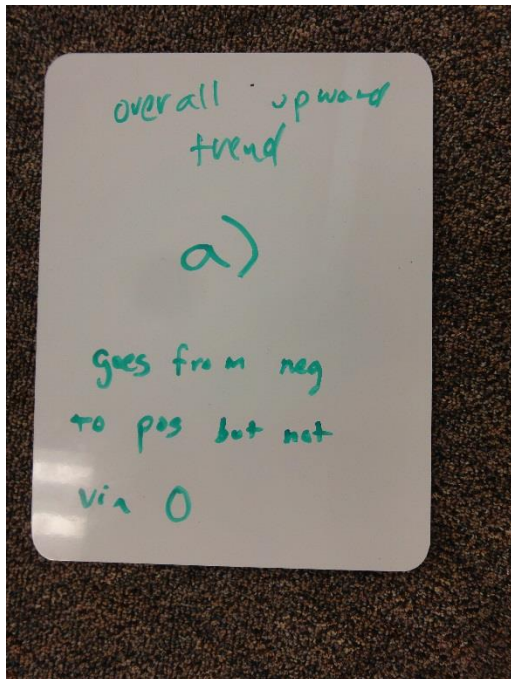


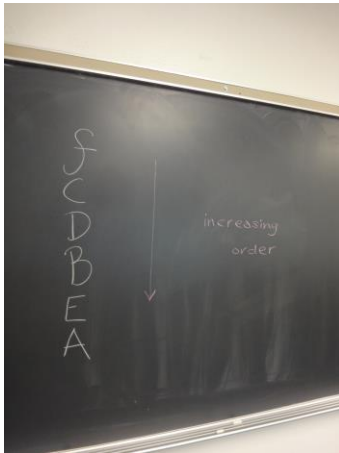
**Problem 1.** Which item's graph (a, b, c, or d) is the derivative?



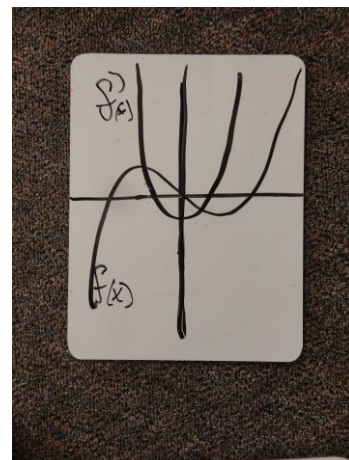
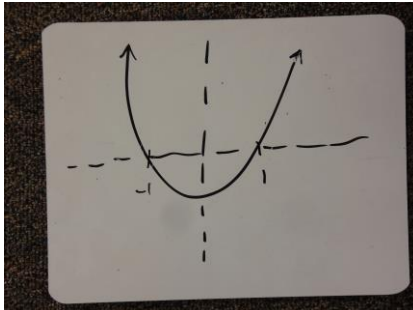
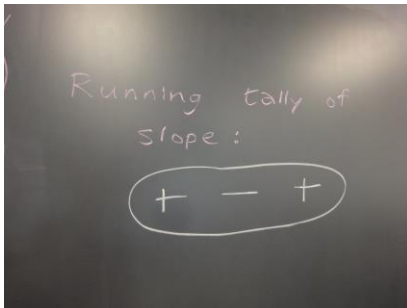
← Call this (\*\*)

Description of the above picture labelled (\*\*): From left to right, we see a negative (-) slope followed by a zero slope (at the dotted line) followed by a positive (+) slope. Thus, when you graph the derivative (at the right), you should see negative values followed by a zero value followed by positive values (see the straight line graph).

**Problem 2.** Write down the slopes in increasing order.....



**Problem 3.** Sketch  $f'$  given a graph of  $f$ .



**Problem 4.** Application (charging a battery)

