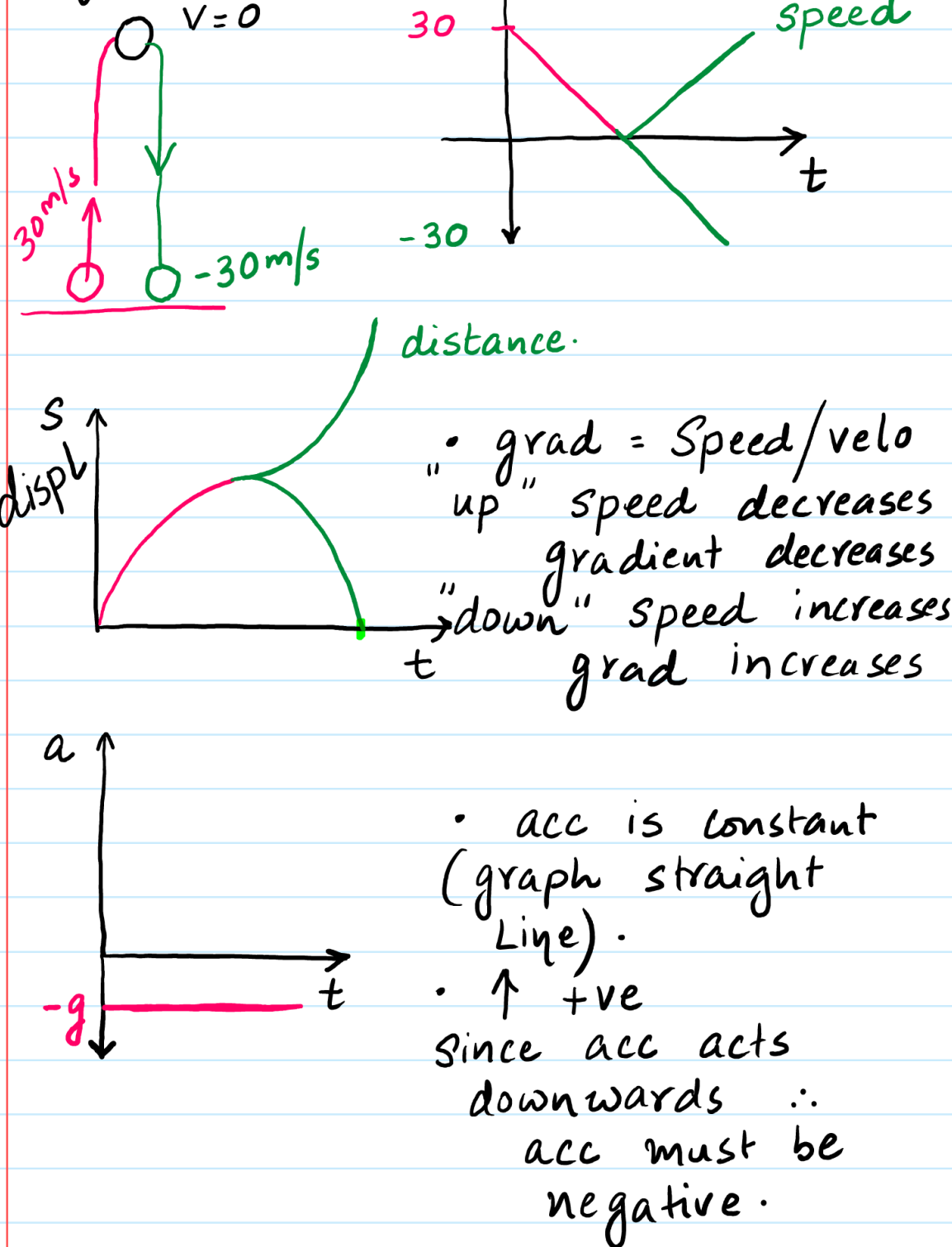
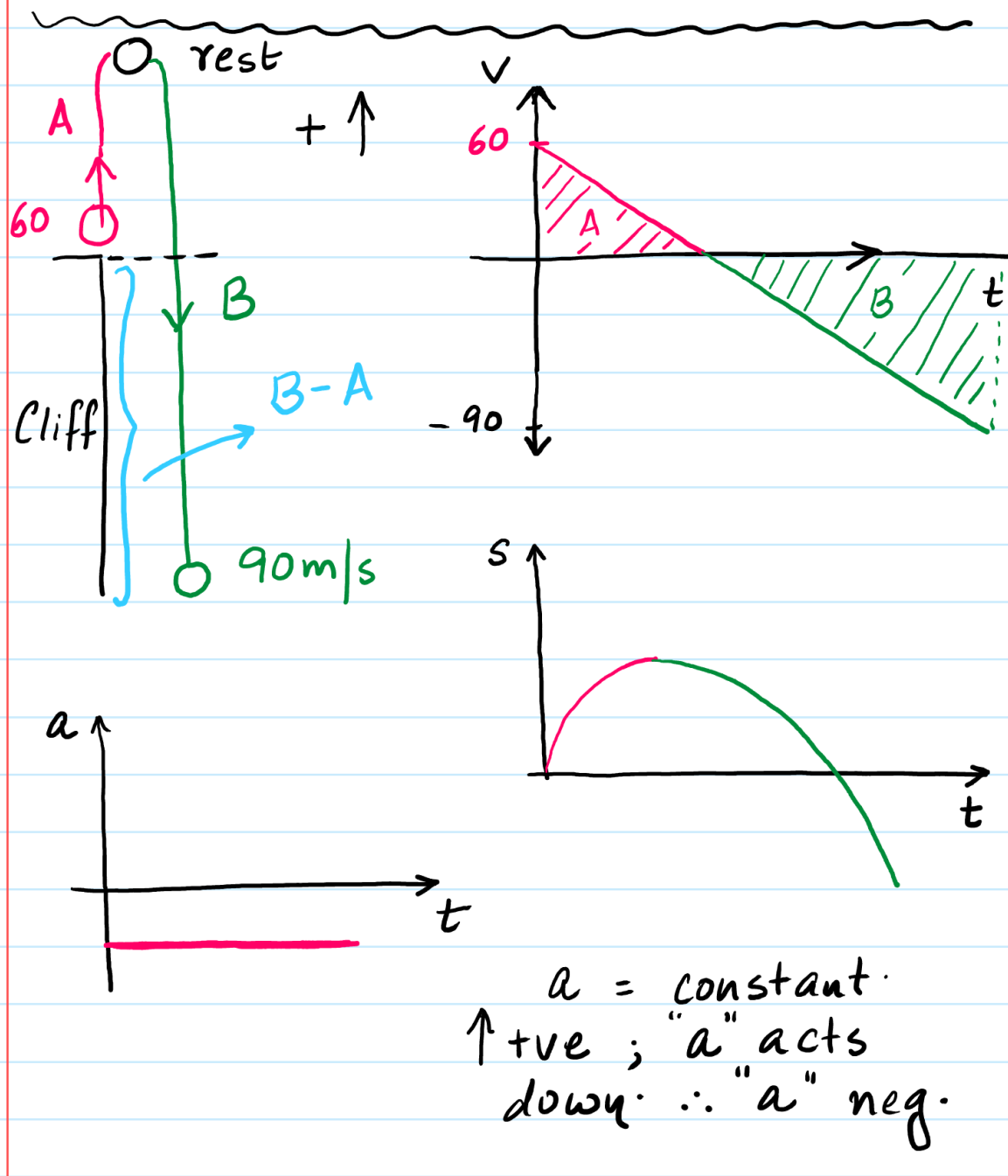
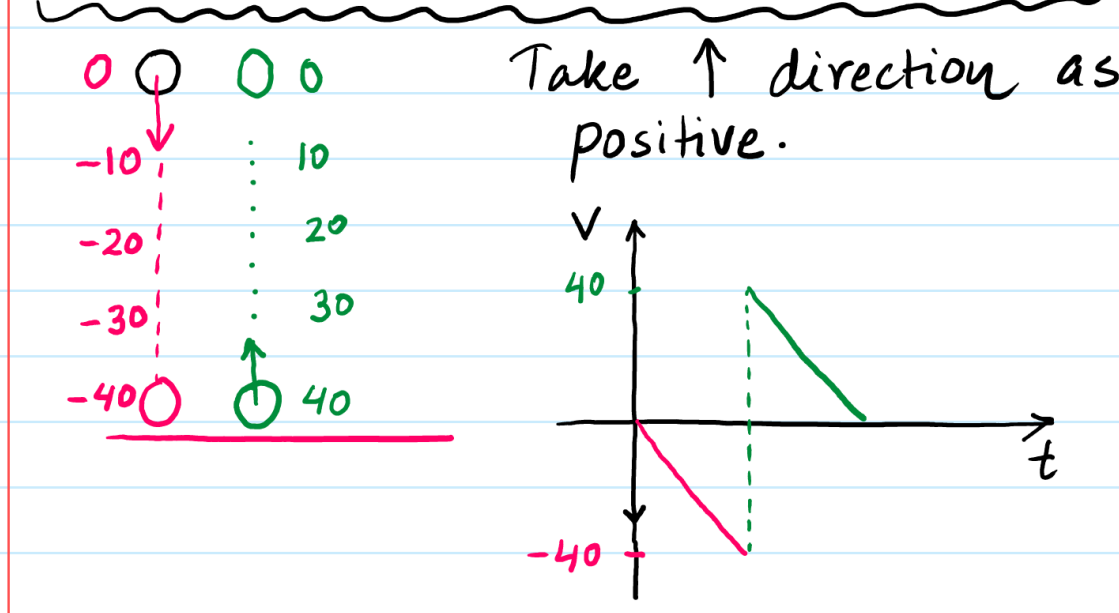
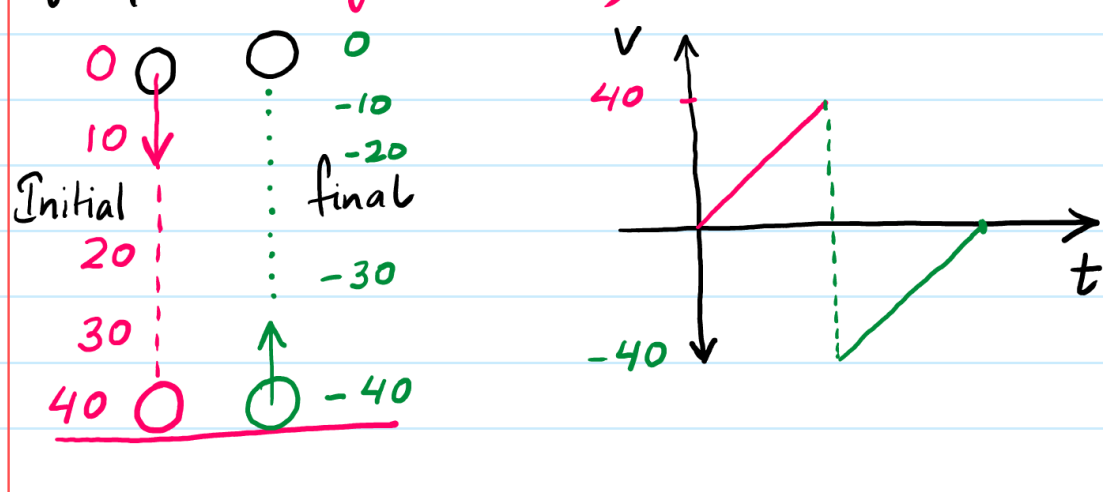


# Graphs of $v/t$ , $s/t$ and $a/t$ for an object moving under the influence of gravity.

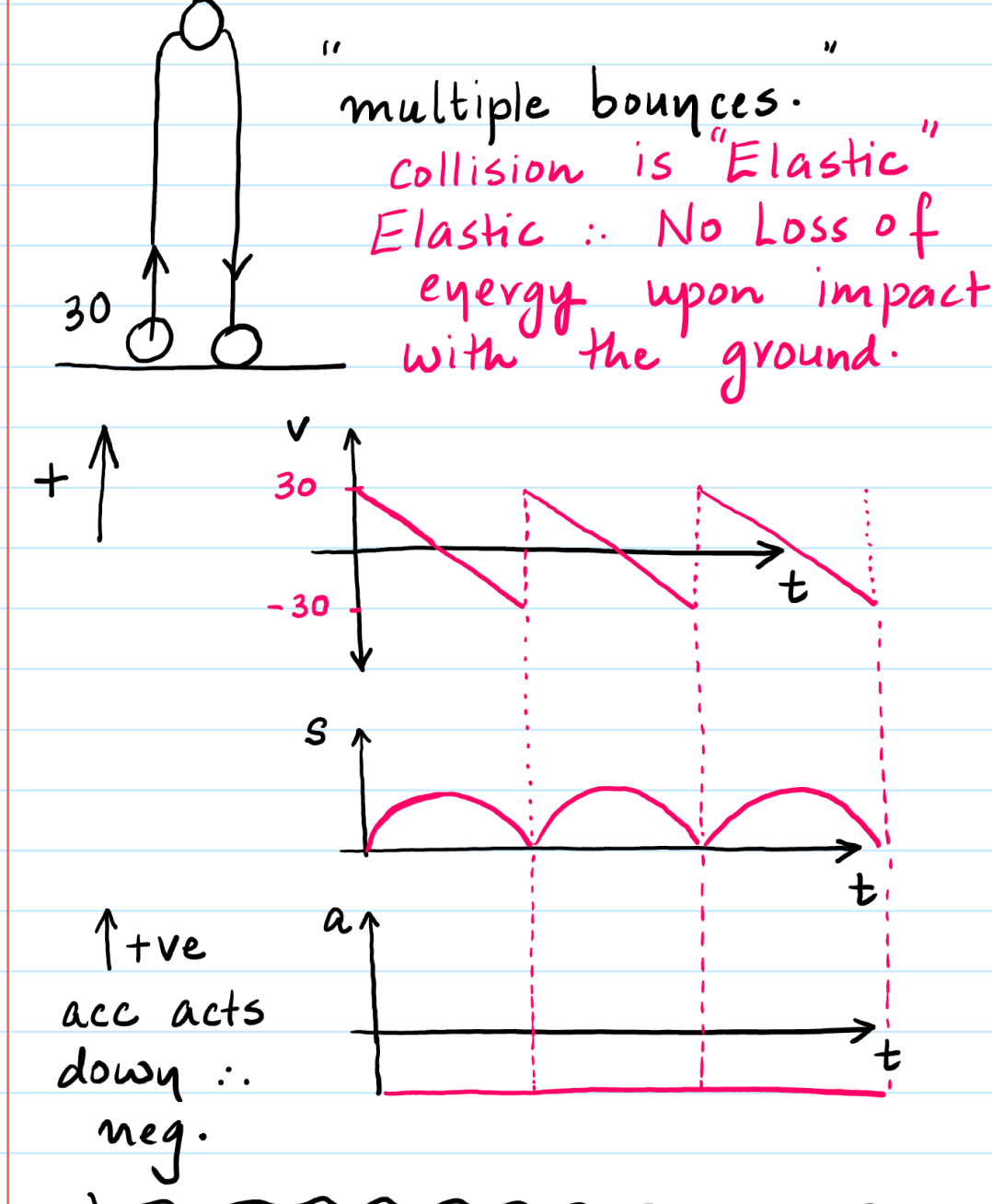
Q: An obj is projected vertically upwards with 30m/s. It reaches its max. height & returns back to ground. Taking the upward direction as positive construct the graphs (ignore AR).



Q: A ball is released from rest. It hits the ground with 40m/s & rebounds back to reach its starting pt. Taking  $\downarrow$  direction as positive sketch the following graphs (ignore AR).



## Graph (in case of multiple bounces)



Same condition but InElastic Collision  
 InElastic  $\therefore$  Loss of Energy upon Impact

