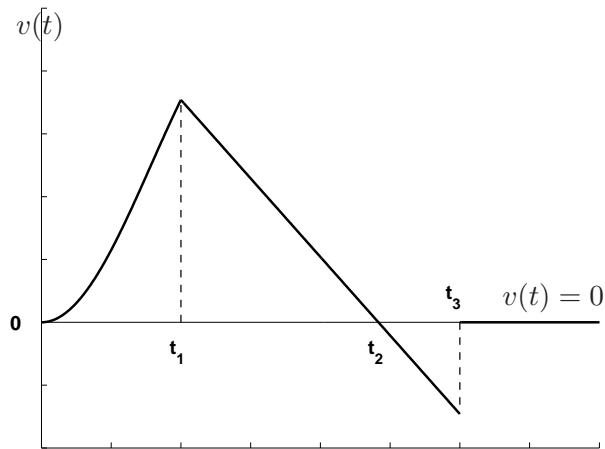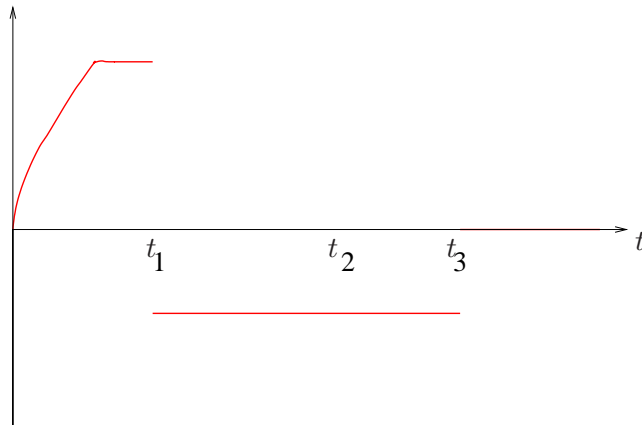6. (10 points) A budding rocket scientist, Seema, has launched her model rocket from the ground at time $t = 0$. The velocity profile for Seema's rocket is given in the graph below. (Note: Since the vertical scale is not given, we are interested in the "shapes" and general behavior on the graphs below.)

(a) Sketch a graph of the acceleration of the rocket as a function of time on the axes below.

(b) Sketch a graph of the height of the rocket as a function of time.