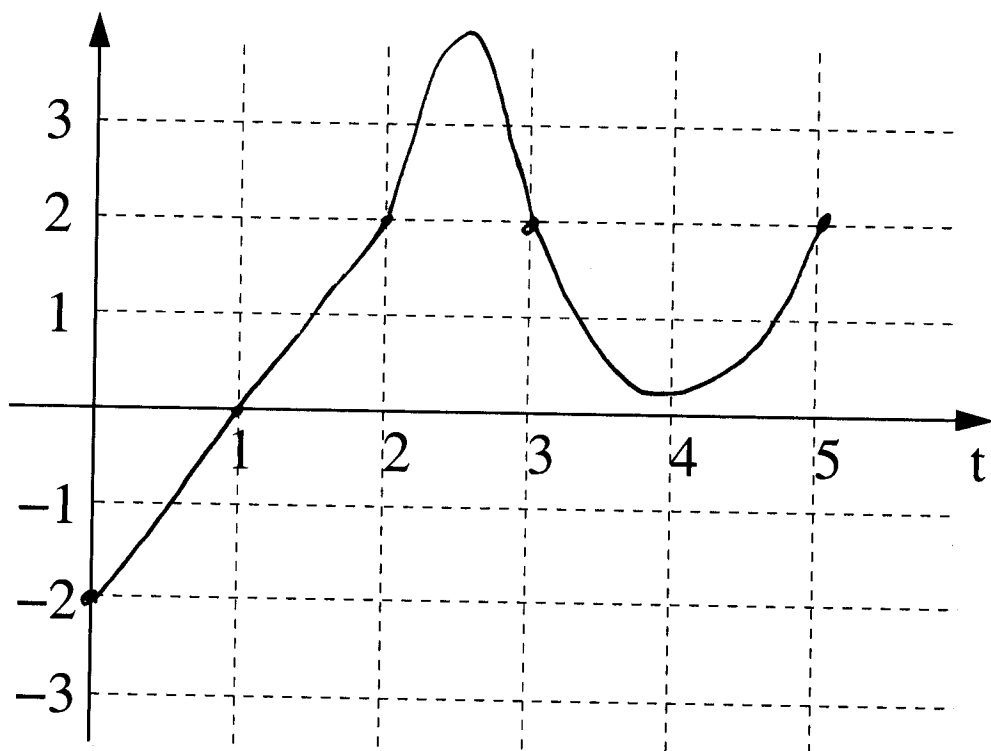
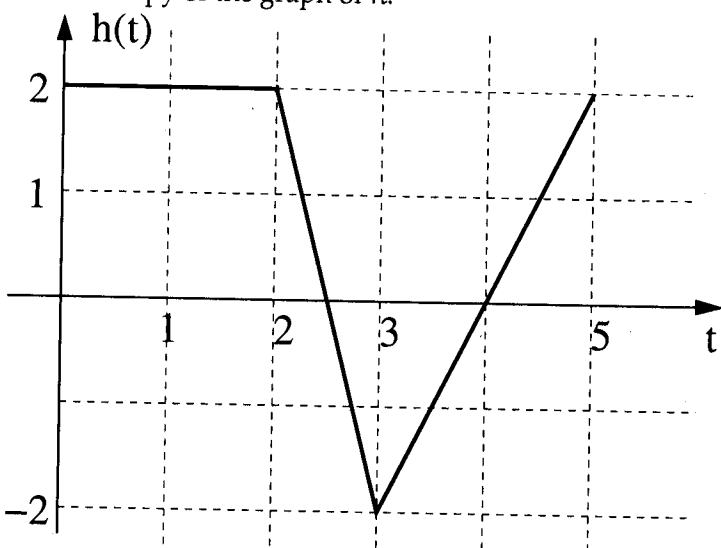


(b) $G(t)$ is a function whose derivative is $h(t)$, ($G'(t) = h(t)$). Sketch the graph of G , assuming that $G(0) = -2$. Be as accurate as you can possibly be using the information given. Include the usual things like critical points, inflection points, concavity, etc. and, where possible, their coordinates.



Another copy of the graph of h :



$$0 \leq t < 2 \Rightarrow G(t) = 2t - 2$$

$$2 < t < 3 \Rightarrow \text{Area under } 2t^2$$

$$h(t) = -4t + 10$$

$$\Rightarrow G(t) = -2t^2 + 10t - 10$$

$$3 \leq t < 5 \Rightarrow h(t) = 2t - 8$$

$$\Rightarrow G(t) = t^2 - 8t + 55$$