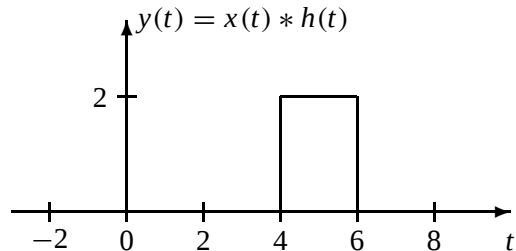
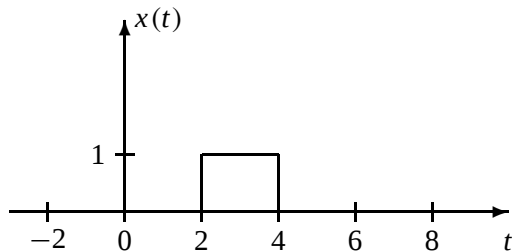


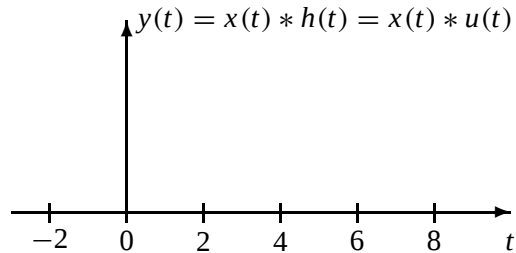
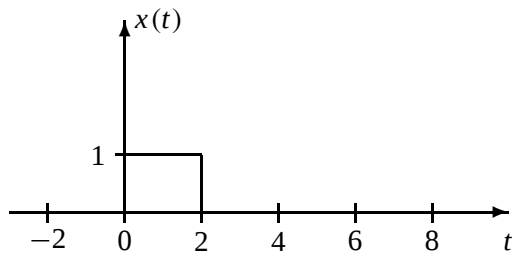
PROBLEM:



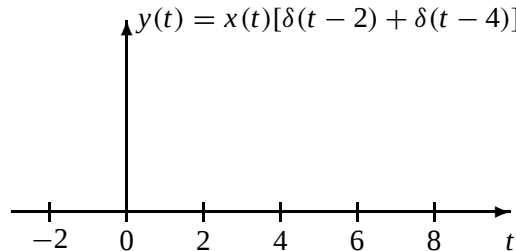
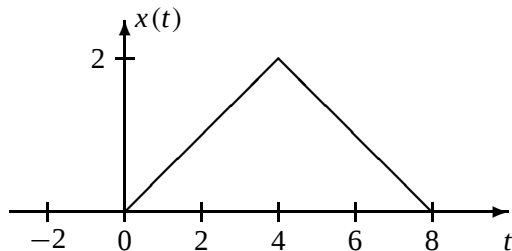
(a) Given that $y(t) = x(t) * h(t)$, find $h(t)$. $h(t) =$ _____



(b) If $h(t) = u(t)$, plot $y(t) = x(t) * h(t)$ on the graph on the right. *Be sure to label the $y(t)$ axis.*

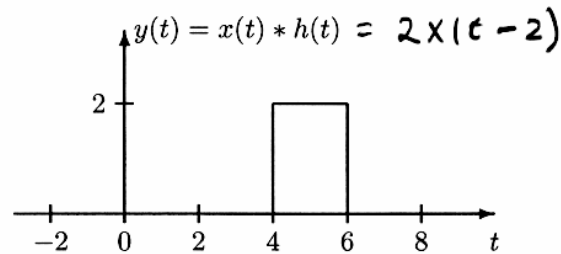
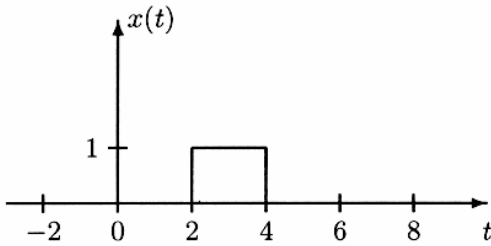


(c) Plot $y(t) = x(t)[\delta(t - 2) + \delta(t - 4)]$ on the graph on the right.

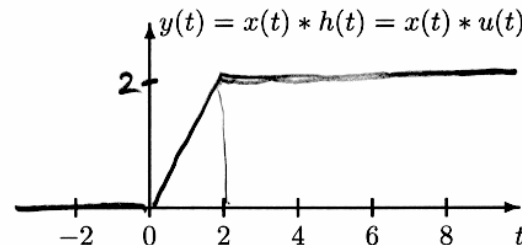
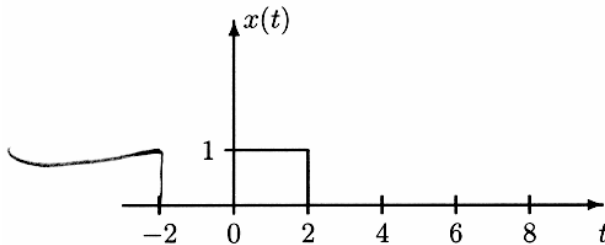




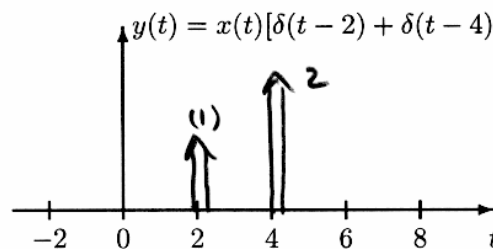
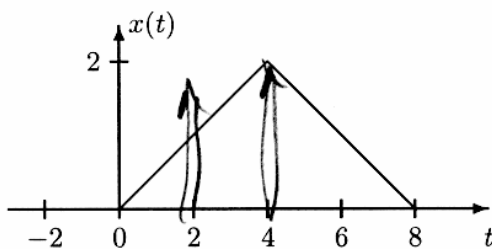
(a) Given that $y(t) = x(t) * h(t)$, find $h(t)$. $h(t) = \underline{2\delta(t-2)}$



(b) If $h(t) = u(t)$, plot $y(t) = x(t) * h(t)$ on the graph on the right. Be sure to label the $y(t)$ axis.



(c) Plot $y(t) = x(t)[\delta(t-2) + \delta(t-4)]$ on the graph on the right.



$$\begin{aligned}
 y(t) &= x(t)[\delta(t-2) + \delta(t-4)] \\
 &= x(t)\delta(t-2) + x(t)\delta(t-4) \\
 &= x(2)\delta(t-2) + x(4)\delta(t-4) \\
 &= \delta(t-2) + 2\delta(t-4)
 \end{aligned}$$